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ABSTRACT

Secondary school curriculum is evaluated in this study designed to assess the degree of accordance between curriculum designers' intentions and perceptions of those intentions by curriculum implementors (administrators, supervisors, and teachers). A survey instrument was composed of nine sections that addressed learning objectives, classroom activities, assessment, staff, facilities and equipment, textbooks, teachers' manual, process of curriculum development, and curriculum content. Data were also collected on implementor demographics and opinions. Five conceptual factors--student personality development, classroom demographics, student-centered curriculum, integration of social and cultural heritage, and development of thinking abilities--and eight demographic variables were used as independent variables. A questionnaire was administered to 843 teachers, 99 superintendents, 75 administrators, 100 parents, 531 secondary students, 254 grade 3 students, and 110 secondary school graduates. Teacher and administrator responses were more similar than supervisor responses, which indicated a greater diversity among administrator characteristics. Descriptive statistics indicated an overall high degree of agreement, with the exception of items related to extracurricular development, affective domain, resource allocation, staff appointment, and staff participation. Recommendations are made to address the issues of: (1) improvement of Islamic relations; (2) collaboration between arts and sciences; (3) comparative studies of school districts; and (4) inservice teacher training programs. Tables and figures, appendices that include the survey instrument and statistical findings, and an extensive bibliography are included. (LMI)

Sultanate of Oman

Ministry of Education and Youth

EVALUATION OF CURRICULUM THE CASE OF OMAN:

SECONDARY LEVEL
PART I

1989

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Ministry of Education and Youth

EVALUATION OF CURRICULUM: THE CASE OF OMAN

SECONDARY LEVEL
PART 1

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1989

PREFACE

Education in Oman has made great strides since 1970, the beginning of the Omani Renaissance. Educational development was initiated at that time with the statement of the Omani educational philosophy. This philosophy incorporated the Omani history and heritage together with the Omani ambitions for the future. Furthermore, it embraced the modern scientific and technological trends which characterize this era of human civilization. The general goals of education were subsequently derived from this philosophy and, therefore, centered on developing the Omani learner who is loyal to his Islamic, Arabic and Omani heritage. Simultaneously, these goals center on developing a tolerant learner who is willing to change and able to assimilate and use modern science and technology to help achieve the Omani social and economic plans. Specific objectives for every level of public education: primary, preparatory and secondary, were derived from the general goals and were used as a basis for the design of the Omani curriculum for each of these levels. This process started in 1976.

The curriculum for each of these educational levels addresses the special needs and interests that are characteristic of each level and also considers the general level of intellectual ability and development of the learners. The secondary school curriculum, for example, is designed to respond to the needs and interests of a population of young men and women who live the difficult period of adolescence and proceed toward the first stages of maturity. Therefore, it emphasizes the learner's ability for self-discovery and self-actualization and helps the learners to identify their future interests whether they be to pursue further education or to join the workforce. The curriculum is

designed to equip the learner with a broad and versatile background of knowledge and skills that can help him/her to succeed in either of these choices.

The Ministry of Education made a firm commitment to regularly monitor the effectiveness of its educational programs. Therefore, it was decided that a research study to evaluate secondary school curriculums would begin in 1988. This present evaluation study was designed to gather valid and reliable data now that the curriculum has been implemented over an appropriate researchable time period. Through this evaluation, an attempt has been made to judge the extent to which specific goals and objectives of the secondary school curriculum have been achieved. A battery of questionnaires covering all aspects of the design and implementation of the curriculum was created in various versions to suit the groups of respondents, namely teachers, supervisors, educational administrators and parents. Additionally, questionnaires were given to secondary school students and recent secondary school graduates, who have studied the curriculum and now are either pursuing higher education or employment opportunities.

The analysis of the responses gathered from the various population samples have yielded some interesting results that pinpoint the areas of strength and areas of weakness in the curriculum. Consequently, recommendations were tailored to reinforce the strengths and remedy the weaknesses. This present study is intended to provide the Omani educational community with information to help improve the implementation of the present curriculum. This same information should help to improve the process of curriculum development and design for future curriculum projects.

It should be emphasized here that it is under the wise direction and guidance of His Majesty Sultan Qaboos Bin Said and through his unyielding commitment to the development of a modern Oman in all aspects: economical, social and educational, that such major advancements in education have been accomplished. The Minister of Education who is responsible for the development and implementation of curriculum in the Omani schools looks forward to the application of this research project as a step along the path toward achievement of our national goals and the advancement of our people.

This concludes the vigorous study of the evaluation of the primary, preparatory and secondary Omani curriculum.

Yahla Bin Mahfoudh Al. Mantheri

Minister of Education and Youth

ACKNOWLEDGMENTS

During the preparation of this present study of the Omani curriculum at the Secondary School level, I have been cognizant of the magnitude of the continuous study commencing with the elementary school curriculum in 1985, proceeding to the preparatory school curriculum in 1987, and, finally, concluding this project with the secondary school curriculum in 1990.

Furthermore, the activities, interactions, suggestions, and recommendations from the conferences held after the publication of the primary and preparatory level studies, clarified questions and gave new directions to this present study.

This last part of the research project, the study of the secondary Omani curriculum, was enriched by the contributions of the Minister of Education and Youth and the people who participated in the symposia. From most research nothing evolves, but these assemblies of teachers, supervisors, administrators, and parents studied findings and results and suggested implementation of the results. These groups made recommendations to the Minister of Education and Youth, who formed committees to study in depth the findings and implement the recommendations.

For each level, this process was followed by a conference so that results and findings were translated to recommendations. The Minister of Education and Youth acted upon these recommendations by forming committees to develop a plan of action to implement the findings derived from the research reports and conferences.

A follow-through activities of this process will be done

for the secondary level report. This concludes the comprehensive study of the evaluation of the Omani curriculum of the primary, preparatory, and secondary schools.

For their diligence and sustained efforts in checking the items in each of the subject matter areas, administering the questionnaire in the various school districts, and recording the reponses on the computer sheets, I give special thanks to the personnel of the Curriculum Department at the Ministry of Education and Youth.

For their observations of the Omani secondary school curriculum, I thank all of the teachers, supervisors, and administrators who responded to the questionnaires and facilitated the gathering of data for this research project. In addition, I thank the parents, students, graduates who are studying in the higher education system at the University of Qaboos and junior colleges, and graduates who have joined the workforce; for these Omani citizens also responded to questionnaires and facilitated the gathering of data for this research project.

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Taher A. Razik

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Chapter 1

THE EDUCATIONAL CONTEXT

Educational Development in Oman

Since 1970, educational development in the Sultanate of Oman has witnessed three distinctive stages. The first stage of educational development, discharged during the years 1970 to 1975 by the Ministry of Education and Youth, mainly aimed at providing opportunities for children to enroll in schools. Hence, a large number of schools were established in many parts of the Sultanate. The most distinctive feature of this plan was the emphasis on the quantitative aspects of education in order to provide, to the extent possible, equality of opportunity for Omani children to attend schools.

The second stage of development in education was accomplished in the first five-year plan from 1976 to 1980. The main emphasis in this second stage was placed upon improving the quality of education in addition to providing more opportunities for children living in remote villages to attend schools. Balanced efforts in providing qualitative and quantitative education were stressed. During the period of this plan, considerable attention was also given to coordinate education to the economic and social development planning, to prepare and train skilled manpower required for national development and to prepare teachers for primary education needs. In this plan, the first teacher education institute for Primary Schools was established.

The third stage of development in education was accomplished in the second five-year plan from 1981 to 1986. This stage resulted in great

improvement in the educational system and organization, progress in curriculum structure and content at all levels of schooling, and development in teaching methods through integrated in-service programs for teachers. In this stage of development, an important step was taken to enrich the quality of preparation of primary school teachers, by establishing the intermediate colleges for teacher training.

The basic feature characterizing the rapidly-developing educational movement in the Sultanate of Oman over the last sixteen years is that, from the moment of its inception, the movement adopted a clear-cut philosophy. This philosophy incorporates well-defined approaches and embraces general, fundamental principles from which all principal educational goals have been derived and formulated. The Omani philosophy of education is distinctive in that it is (1) humanistic in its pursuit of Oman's welfare among nations; (2) ambitious in seeking a better life for the people of Oman within the framework of characteristic beliefs and aspirations; (3) comprehensive in developing the manpower needed for the labor market; and (4) cognizant of the principles of universality and integration, and in doing so accommodates the objectives of contemporary education throughout the world as well as the present needs of the Omani society.

Therefore, the Omani educational philosophy recognizes that various circumstances have for some years hindered Oman from keeping pace with the cultural adaptations which ordinarily occur during the passage of time. Since July 1970, Oman has been, and continues to be, dedicated to reconstruction and urbanization appropriate to its general development as a modern nation. Education is considered the basic means for

developing human resources in any country. It is regarded as a long-range investment rather than an immediate service activity. Oman, as a developing country, acts on these premises, building its modern educational philosophy on the foundation of education for development and the belief that carefully planned education can make important contributions to the economic and social development of its society.

Educational Aims and Priorities:

Inspired by Oman's philosophy of education and the national, social, and spiritual values it represents, the general aims of education were formulated deliberately to emphasize the following:

1. Education is a universal right for all members of the Omani society. The government considers itself responsible, with all the possibilities and educational institutions at its disposal, to meet each individual's need for education without limitations;
2. Each individual's abilities are to be developed, unrestricted by time or place, in order that each may learn and pursue educational progress all through life. Each person should be enabled to satisfy his needs for a uniform education covering all aspects of his personality and making him capable of effecting change in his environment;
3. The necessary manpower for all sectors is to be provided, for the sake of promoting the country's development plans and projects and for providing those facilities and ancillary aids

for specialized and higher education as may be consistent with Oman's development requirements;

4. The Omani individual is to be enlightened about his rights, duties and obligations towards his own country and the greater Arab Motherland, leading to his comprehension that unity and collaboration among the Arab people are sources of power for him; and
5. The individual's ability to make use of his leisure time in useful and beneficial pursuits is to be encouraged, by means of creating suitable activities aimed at insuring the welfare and progress of both the individual and the society in which he lives.

Conscientiously applying these aims, Oman's educational leadership has achieved steady progress in state-wide education and individual development. All parts of the Sultanate are involved. In 1970, not more than three schools with a total enrollment of 909 students and a teaching staff of 30 were in existence. By comparison, in the academic year 1985-86, schools numbered 606 with a total enrollment of 221,694 male and female students. Of these 79.14 percent were in the primary level, 15.16 percent were in the secondary level. Females accounted for 42 percent of the total number of students. Teachers numbered 10,131.

The second Five-Year Plan established these objectives for the 1981 to 1986 phase: (1) increased emphasis on the quality of education programs and facilities; (2) the diversification of secondary school options, relating them to the needs of the Omani society and its manpower development; (3) renewed efforts to balance educational

development between the interior and populated areas; and (4) the establishment of priorities for higher education abroad, in conformance with the country's needs.

Secondary school education is not yet universally available in Oman, but rapid advances are taking place to meet this need. In addition, vocational training is rapidly expanding to help the Sultanate overcome the critical shortage of trained local manpower.

THE ORGANIZATION OF EDUCATION IN OMAN

Governance

The Ministry of Education and Youth is responsible for primary, preparatory, and secondary education; teacher training; adult education; and eradication of illiteracy campaigns. Through a network of regional directors, the Ministry supervises the administration of educational programs and policies. A further system of supervisors has been initiated to monitor the standards of achievement and curriculum implementation in the schools within a given region.

The Ministry of Social Affairs and Labor, charged with the responsibility of developing the nation's manpower skills, supervises vocational training and special training programs. Current plans call for the establishment of additional vocational centers throughout the country. Priority is to be given to training in such fields as construction, electricity, mechanical engineering, clerical technology, agriculture, fisheries, and mining.

Other ministries supervise education related to their missions. Among them are the Ministry of the Sultan's Cabinet (or Diwan) Affairs,

the Ministry of Health, and the Ministry of Defense. Sultan Qaboos University is entrusted with the overall responsibilities for university education.

Structure of the Educational System

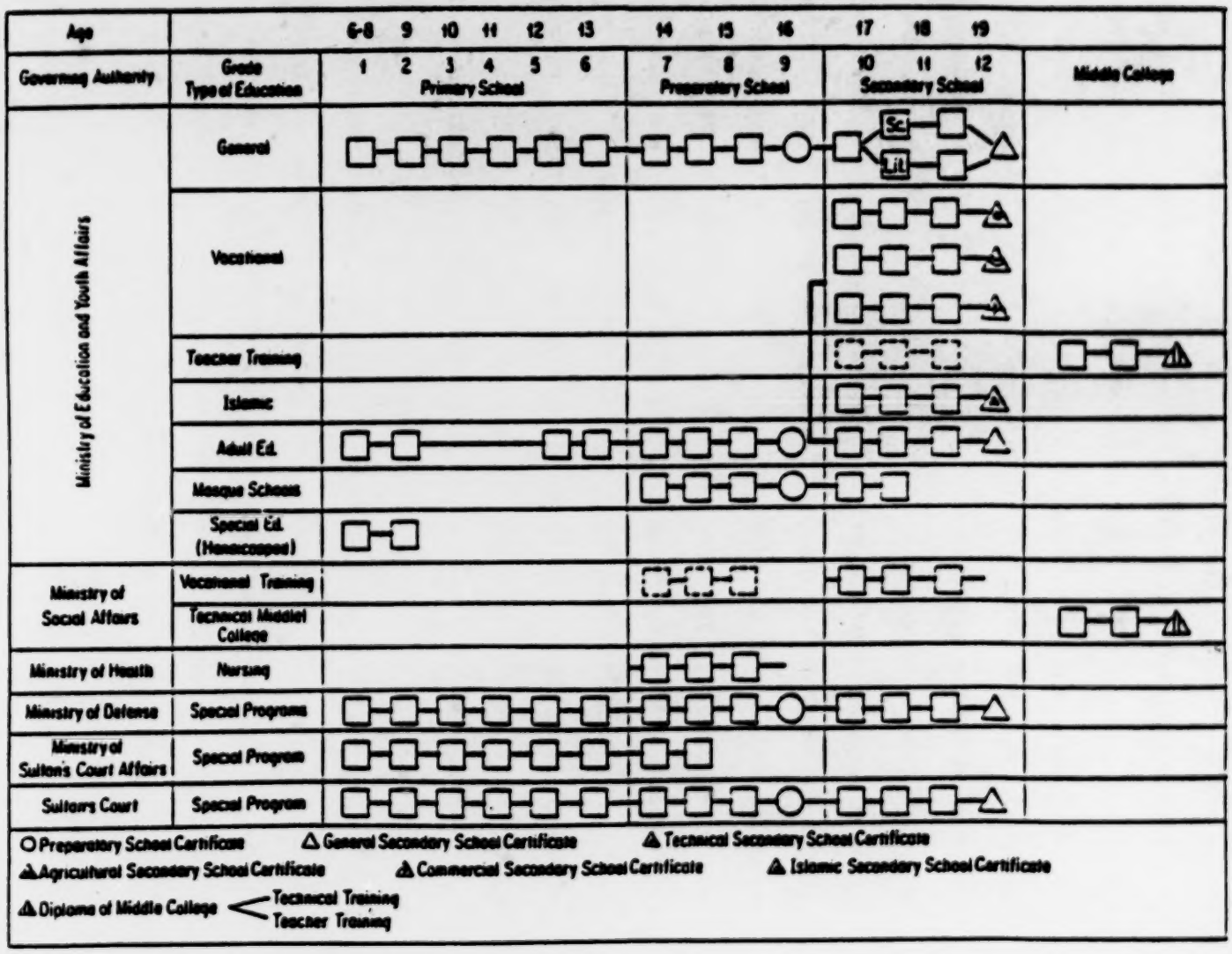
Education in Oman is based on a 6-3-3 structure: six years of primary education, three years of preparatory education, and three years of secondary education (see Figure 1). At the primary level, students receive instruction in the basic skills. At the preparatory level, they may pursue general education, health sciences, military studies, or vocational training. At the secondary level, they may pursue general or Islamic education (with humanities and science sections in the second and third years), teacher training, commercial education, agricultural studies, industrial education, vocational training, health sciences, or military science. The first university in Oman opened in 1986. Holders of the Secondary School General Certificate qualify for admission to this university.

General Education

Primary Education

Children whose age is not less than six years and not more than eight years (calculated as they commence on this level) are admitted in the first grade of primary school. Primary education is not compulsory. However, the percentage of Omani children enrolling in primary education continues to increase because of widespread enthusiasm for education. The children remain in the primary level for six years. Successful

FIGURE 1 Educational ladder of the Omani educational system



Source: Ministry of Education, Sultanate of Oman.

students are promoted to the first grade of the preparatory level.

As Oman's educational infrastructure has evolved, beginning with the 1970 expansion and extension of educational opportunity, the total number of registered primary school students has increased dramatically. The average annual number of registered students and the average annual admission of new students have also increased. In the academic year 1985-86, male and female students registered in the primary level numbered 175,452. A decade ago in the academic year 1974-75, there were only 48,576 students registered. Obviously, the primary population has more than tripled in the ten-year period. By 1985-86, there were 326 primary schools (104 for boys, 118 for girls, and 104 for both sexes). Most schools are segregated by sex, except in the rural areas where the shortage of facilities and staff necessitates shared schools. However, as school, facilities and teachers come to the countryside, separate schools for boys and girls are becoming the rule.

In the year 1973-74, primary level students accounted for 99.04 percent of the total number of students registered. This dropped to 79.14 percent in the academic year 1985-86, showing the proportionally larger expansion of preparatory and secondary education enrollment. Although the primary level continues to constitute the broad base of education, embracing the majority of registered students in schools as a whole, it is clear that the shape of the educational pyramid is changing.

Initially, students completing six years of primary education took a national examination and, if successful, were awarded the General Primary Certificate before proceeding to the preparatory level.

However, in 1976 the Ministry of Education eliminated this certificate. Presently, all students who successfully complete the sixth grade, become automatically eligible to enter the preparatory level.

Preparatory Education

Following primary education, students may progress to the three-year preparatory level. The preparatory level of education is comparatively new in the Sultanate's educational infrastructure. The curriculum stresses general education; however, it includes limited practical studies such as crafts and agriculture for boys and needlework and home economics for girls. Internal school examinations are given every year. Promotion to the next grade requires a passing mark in each subject.

Preparatory schools generally share facilities with a primary or secondary school. The first preparatory schools were established in 1972, one for boys and another for girls. By 1975-76, there were 23 preparatory schools (21 for boys and 2 for girls). The enrollment for these 23 preparatory schools was almost 1,100 students. The dramatic surge at the preparatory level continued in the following years. By 1985-86, there were 213 preparatory schools (94 for boys, 49 for girls, and 70 for both sexes).

Two model preparatory schools (in Sohar and Ruwi) follow the general education curriculum, but also include some technical training. These two model scholls were phased out in 1986. Third-year students may sit for the General Preparatory School Certificate. Health science institutes of the Ministry of Health, military institutes, and

vocational training centers of the Ministry of Social Affairs and Labor also offer instruction at the preparatory level. However, their graduates usually enter career paths rather than pursue certificate-granting programs at the secondary level. A few mosque schools offer an instructional program which combines the primary and preparatory levels. At these schools the emphasis is on Islamic studies and the Arabic language rather than academic subjects.

At the end of the preparatory cycle, students sit for a national examination and, if successful, will receive a General Preparatory School Certificate. These students are then eligible to enroll at the secondary level. Students who fail the examination may not re-enroll as regular students.

There has been a phenomenal rise in the number of preparatory school students since the preparatory level was instituted in 1973. In the 1973-74 academic year, there was a combined total of 146 male and female students. In comparison, the 33,600 male and female students enrolled in the 1985-86 academic year represented 230 times the original number of students attending Oman's earliest 1973-74 preparatory school classes. The total number of students (male and female) at the three educational levels rose from 10,177 in the 1979-80 academic year to 221,694 in the 1985-86 academic year.

According to Razik (1984), 48.9 percent of the students who began preparatory education in 1977-78 successfully completed the level in three years, but the percentage grew to 53.2 percent after four years, the maximum time allowed for enrollment in regular classes in this preparatory level.

Secondary Education

For the three-year secondary level, there is some degree of diversification in order to prepare students for the university or for careers. Secondary schools are segregated by sex and are sometimes housed in the same facilities with a preparatory school.

Secondary education in the Sultanate has a short history. Its actual beginning dates back to the 1973-74 academic year, when one class for the first secondary grade was opened with an enrollment of 25 students. Prior to that date, the preparatory level, which provides students for the secondary level, was still incomplete. Gradually, the number of students reaching the secondary level has increased, but it still constitutes a small percentage of the total student population. In 1985-86, the 12,330 secondary students comprised 5.5 percent of the total enrollment of 221,694 students in the Omani educational system.

Students passing the General Preparatory School Certificate examinations are admitted to the first year of secondary schools. They are distributed among the various types of secondary programs according to their total grades in preparatory school certificate and the available openings in the secondary schools and institutes.

During the 1980-81 academic year 81.7 percent of the preparatory school graduates, as indicated by Razik (1984), were enrolled in various secondary school programs. The distribution of these secondary school enrollees resulted in 47.8 percent in General Secondary, 8.4 percent in Technical, 10.3 percent in Teacher Training, 4.6 percent in Islamic, and 10.6 percent in Adult programs. For the 1981-82 academic year, preparatory school graduates enrolled in secondary school programs

increased to 93.2 percent. The distribution of these secondary school enrollees resulted in 68.0 percent in General Secondary, 6.5 percent in Technical, 13.9 percent in Teacher Training, 3.9 percent in Islamic, and 1.2 percent in Adult programs.

Razik's study (1984), indicated that 63.9 percent of the students who began secondary school in 1977-78 successfully completed the level in three years. The percentage increased to 67.4 percent after four years, the maximum time permitted for enrollment in regular classes.

Secondary education is divided into general secondary and specialized secondary. The general secondary curriculum consists of a one-year program in basic academic subjects, followed by a two-year program in the humanities or sciences. The specialized secondary curriculum includes the usual secondary school academic subjects, with an emphasis on Islamic, commercial, agricultural or industrial studies, or teacher training.

Teacher Education and Training

Training of Omani teachers for the primary schools was initiated in 1976-77. A secondary level Teacher Training Institute was established to accept graduates of the preparatory schools. The duration of this program was three years, after which the graduates received the "Secondary School Certificate for Teachers." In the 1979-80 school year, another program was added. This program accepted the graduates of academic secondary schools into a one-year program of teacher training.

As a step in the improvement and development of the teaching profession, the Intermediate Colleges for male and female teachers were

established in 1984-85. These Intermediate Colleges accept secondary school graduates and train them to be primary school teachers. Subsequently, this step led to the phase out of the earlier Teacher Training Institutes.

The new Intermediate Teacher Colleges were introduced to develop well-rounded teaching professionals who have scientific and educational backgrounds as well as the ability to be social leaders in their local communities. This community emphasis is according to a plan for each of the nine school districts to satisfy its need for primary school teachers from its regional intermediate college.

Graduates of the Intermediate Teacher Colleges are trained to teach both in the first three grades (first, second, and third) as classroom teachers as well as the higher grades (fourth, fifth, and sixth) as subject-matter teachers.

University Education

The foundation stone for the Sultan Qaboos University was laid in November 1982; the university finally opened in September 1986. The university is composed of six colleges: Education and Islamic Sciences, Science, Medicine, Agriculture, Engineering and Arts and Letters. A total student population of 3,000 had been projected.

All university students study the same foundation courses regardless of their intended majors. This initial three-semester program was designed to improve the standards of English, consolidate the science background of students from diverse secondary schools, and include basic general requirements (e.g., Arabic, History of Oman,

Islamic civilization, and English). Upon successful completion of the foundation courses, students will begin their studies in one of the six colleges mentioned above.

Other Types of Education and Training

Preparatory Religious Institutes in Mosques

Numbering seven, these schools combine the primary and preparatory levels and teach the same courses taught in the two levels in general education; however, there is an emphasis on two subjects, namely Islamic education and Arabic. In total, these schools have a student body of approximately 470 students.

Centers of Feminine Guidance

These centers are divided into two types: specialized and non-specialized. There are 4 specialized and 35 non-specialized centers in addition to 15 centers which were initiated and organized by self-motivated groups of women with special interests. The Ministry of Education and Youth provides meeting facilities, financial support, and sometimes leadership for these informal groups which may be devoted to learning special homemaking skills or crafts.

Special Education (School for the Handicapped)

Located at the capital, this school is known as "Hope for the Mute." It currently consists of two mixed classes for males and females. This school provides a primary level of education.

Literacy and Adult Education Centers

Education in these centers is divided into two levels. The first, for the duration of two academic years, is concerned with the eradication of illiteracy among older citizens. The second level, conducted at the adult education centers, is designated for students who have reached fifth grade equivalency in their studies. The courses offered are identical to those offered in the fifth grade in the primary schools. In the adult education centers, education continues through the end of the secondary level. A learner may, therefore, obtain from these centers the relevant certificate evidencing completion of primary education, the general preparatory certificate, and the general secondary certificate. Adult education centers serve the purpose of providing an opportunity for those who, for any reason, have failed to enroll in the standard schools for general education.

Within the adult education framework, a Division for "Serving the Society" was established by the Ministry of Education and Youth. Its purpose is to link school and society, ensure mutual interaction, and enlighten citizens about their human and material potential. To realize this purpose, the Ministry exploits the communication aspect of the educational experience, by helping to change existing concepts where inaccuracies exist and by providing new models for conduct as appropriate. The ultimate goal is the development of a lively, creative consciousness among the people of Oman. This division was later affiliated with the Ministry of Labor and Social Welfare.

EDUCATIONAL AND VOCATIONAL CENTERS AFFILIATED WITH OTHER MINISTRIES

Vocational Training Centers

Vocational Training Centers (VTC's) have been growing rapidly in number under the Ministry of Social Affairs and Labor, as the Sultanate seeks to develop a corps of skilled Omani workers and to reduce its heavy dependence upon expatriate labor.

The three-year vocational training program is open to primary school graduates. This program was upgraded; therefore, a preparatory education certificate is required for admission. Students may attend full-time during the day or part-time during the evening; however, only males are accepted as day students. Evening classes, more practical in orientation, are designed for women and other workers who wish to upgrade their skills or learn new ones. The duration of study in these centers is three years.

Omani Technical College

A post-secondary "Omani Technical College" opened during the 1984-85 academic year. This college is a two-year, post-secondary program, offering studies in fields such as electrical, electronics, civil and mechanical engineering technology, construction, and surveying. A one-semester orientation course precedes the two-year program. It includes an intensive study of the English language, which is the language of instruction, and provides an introduction to technology. In addition to the technical studies, the college offers various business courses, such as accounting, administration, banking, and hotel management.

Admission to the Omani Technical College is based on Secondary Industrial as well as Secondary General Certificate results. Selected advanced graduate students of the Omani Technical College may be allowed to enroll in the College of Engineering of Sultan Qaboos University. To encourage students to be enrolled in the Omani Technical College, stipends are provided. The Omani Technical College is also managed by the Ministry of Social Affairs and Labor.

Institute of Health Sciences

The Institute of Health Sciences (IHS), under the auspices of the Ministry of Health, was founded in 1982 in the capital area and offers professional certificate programs. Prior to its establishment, nurses training was offered only at the Al-Rahma Hospital School of Nursing. The program for primary school graduates at Al-Rahma, which opened as a two-year program in 1970, was lengthened to three years in 1976. The expansion of training facilities and programs for nurses and paramedical staff ranks high in the priorities of the Ministry of Health.

In the modern, fully-equipped Institute for Health Sciences, four training programs are now available: three-year programs for general nurses, laboratory technicians, and health assistants (pharmacy); and a two-year program for nursing assistants. A required six-month orientation course, which emphasizes English language study, prepares the students for the classes which are all taught in English.

Military Schools

The Forces' Education Center (FEC) provides general education and language training (Arabic and English) for primary school graduates. Specific job training follows in one of the several military training institutes in the Sultanate.

The Sultan of Oman's Air Force (SOAF) provides a 15-month technical training program for primary school graduates. The course includes general English, general science subjects, and a full-trade training program.

The Sultan of Oman's Land Force (SOLF) provides a 15-month technical training program for primary school graduates who wish to be electrical and mechanical technicians. Instruction, of up to nine months, is offered in such fields as vehicle maintenance, carpentry, and welding.

The Royal Guard Boys' Technical School is a boarding school for boys who are related to active members of the Sultan's armed forces. The curriculum includes a general education program in Arabic and a basic technical education program in English.

The Ghala Military School offers a program of secondary school studies.

Graduates of these training programs at military institutions are not likely to proceed to post-secondary institutions.

Military schools are managed by the Ministry of Defense.

Other Training Programs

Individual ministries and companies offer short-term training programs to upgrade employee skills. The Institute of Public Administration, under the aegis of the Civil Service, offers courses for clerical and administrative personnel employed by the government. Petroleum Development Oman (PDO) operates a training program for its technical and administrative staff. Among the other institutions which offer special training for their employees are Omantel (Oman Telecommunications), Oman Research Department (ORD), The Royal Oman Police, and the Oman Development Bank. These and similar programs are designed to provide job-related training and are not academic in nature.

CURRICULUM DEVELOPMENT

With the educational infrastructure in place in Oman, the Second Five-Year Plan (1980 to 1985) focused on the improvement of the quality of education. Prior to this time, textbooks designed for schools in Kuwait and Qatar were used in Oman. However, these textbooks neither reflected the culture or the economic conditions nor the philosophy of education of Oman. The textbooks imposed an imported curriculum with the underlying goals and aims designated by other countries. Although extensive efforts were directed toward adapting and modifying the Qatari textbooks to achieve the Omani educational objectives, the persistent need to design an Omani curriculum consistent with the aims and priorities of the national development of Oman became apparent.

Efforts to develop an Omani curriculum began with the Minister of

Education instituting a Consulting Committee for Curriculum to coordinate the diversified activities of a broad range of personnel from the various Omani ministries and government institutions plus subject matter experts. Their primary tasks were to survey the existing educational system; define the objectives for each subject matter area; and develop the curriculum for the primary, preparatory, and secondary levels.

From this first step of the Omanization of the curriculum evolved the task of designing the learning activities, student textbooks, and teachers' manuals for the subject matter areas as specified by the objectives for the curricula of each of the educational levels. The student textbooks and teachers' manuals were field tested and revised. To facilitate the implementation of the new curricula slated for the 1978-1979 school year, special conferences were designated for training the teachers in the use of the new educational materials with special emphasis on the evaluation procedures to assess student mastery of subject matter objectives.

Present Status of the Omani Curriculum

The Omani curriculum designed for the primary, preparatory, and secondary schools has been utilized for the past eleven years. At this time, it is necessary to evaluate the curriculum of the subject matter areas on all three levels: primary, preparatory, and secondary. Evaluation of the curriculum is especially important because neither a formal model of evaluation was proposed or followed during the process of design of the curriculum and production of materials nor was a

summative model of evaluation proposed and utilized during the implementation of the curriculum. Therefore, the purpose of this present study is to evaluate the curriculum to identify its strengths and weaknesses with respect to the stated objectives and to indicate the extent to which these objectives have been met. Curriculum development is a dynamic process; therefore, from the statistical data of this present study, recommendations will be offered to reinforce the strengths of the Omani curriculum and to eliminate the obstacles that hinder the efficiency of fulfilling the objectives of the curriculum.

The evaluation of the Omani curriculum has proceeded in three stages beginning with the primary schools which was followed by the evaluation of the curriculum of the preparatory level. This present study presents the third phase which concentrates on the evaluation of the curriculum in the secondary level.

Chapter 2

CURRICULUM DEVELOPMENT IN OMAN

Developmental Background of the Omani Curriculum

The basic element of any nation's growth and progress is the development of its human resources. Education, the societal institution for human resources development, integrates the system of goals, objectives, plans, strategies, and resources to endow the individual with the values, skills, and competencies defined by the society. The core of any educational system is its curriculum which incorporates all these facets in a plan of action to facilitate learning outcomes. Therefore, curriculum development is a dynamic process for a nation whether it is at the onset of a development phase or has already reached a sophisticated level of development.

From the initiation of the Reform Movement in the Sultanate of Oman, the role of education in accomplishing the goals of the movement had been recognized, along with the need for a curriculum designed specifically for the growth and development of the Sultanate of Oman. Thus, extensive efforts were channeled to curriculum development.

Prior to 1975, Oman utilized the Qatari textbooks. This practice imposed the Qatari curriculum in Oman where different national goals and objectives had been specified by its own particular values and needs. By adapting and modifying the Qatari textbooks, some of the goals of the social and economic plans of the reform movement were achieved. However, it became evident that it was necessary to design an Omani curriculum.

With the decree of December 19, 1974, the Minister of Education in Oman formed a committee of twelve members: the head of the curriculum division in the directory of research and development, as chairman; nine members from the technical staff in the directory of research and development; and two members from the department of illiteracy and adult education.

It was this committee's responsibility to prepare working papers consisting of a statement of the Educational Philosophy and Policy of Oman; the major general goals of education; the goals and objectives for the primary, preparatory, and secondary levels of education; general principles to be considered in curriculum design for the schools; and the choice, organization, and time allocation of content in each subject matter area for each grade level.

In preparing the working papers, the above committee relied upon the speeches of His Majesty the Sultan of Oman and on a working paper prepared by consultants to the Ministry of Education along with papers prepared by members of the directorate of research and development. Upon revision, the draft of the philosophy of education in Oman was distributed for survey purposes to the Ministries for the Sultani Court; Islamic Affairs; Justice; Interior; Information and Cultural Affairs; Labor and Social Affairs; Public Work; Health; Agriculture; Oil, Minerals, and Fisheries; Commerce and Industry; Public Land; Transportation; and the Council of Development; Office of the Governor of the Capital City; and the Monetary Institute of Oman.

The responses of those surveyed were incorporated in the final form of the paper which delineated the philosophy of education, the

major general goals of education; and the goals and objectives for the primary, preparatory, and secondary levels of education.

The working paper on the general principles to be considered in curriculum design for the schools; and the choice, organization, and time allocation of subject matter content in each subject matter area for each grade level was revised, and the final form was presented and approved by the Omani Committee on Education on May 12, 1975. (Ministry of Education Report 1976, Arabic Origination.)

PHILOSOPHY AND GOALS OF EDUCATION IN OMAN

In a concise analysis in The Internal Efficiency of the Omani Educational System, Razik (1984) describes the Omani philosophy as "a clear cut philosophy of education that incorporates well-defined approaches, and embraces general, fundamental principles from which all principal educational targets have been derived and formulated" (p. 1). Four elements articulated in the Omani philosophy of education are that it is: (1) humanistic in its pursuit of Oman's welfare among nations; (2) Arab-Islamic in obtaining its ideological and cultural inspiration from genuine Arab and Islamic values; (3) ambitious in seeking a better life for the people of Oman within the framework of characteristic beliefs and aspirations; and (4) endeavoring to realize the principles of universality and integration, and by doing so, accommodates the aims of contemporary education as well as the present and future needs of the Omani society.

Farhan, Saada, Abu Holwa, and Marie (1985) identified several of the general ambitions and expectations of the Omani philosophy of

education as curriculum guidelines: (1) guidance for the holistic development (physically, mentally, spiritually, emotionally, and morally) of the Omani individual; (2) liberation and utilization of the energies of each individual in the development of a contemporary life-style within the values and traditions of the Omani society; (3) modernization of the Omani society through the development of scientific and technical skills and attitudes to achieve competence in a modern technological world; (4) achievement of economical progress that reflects higher national production and income and in a higher standard of living for the individual through development of social responsibility and awareness; and (5) strength for national unity, pride, and emphasis of the Omani heritage and its Arabic and Islamic roots.

EDUCATIONAL AIMS AND PRIORITIES IN OMAN

Razik (1984) emphasizes that the general aims of education accommodate the national, social, and spiritual values by deliberately emphasizing the following principles:

1. Education is a universal right for all the members of the Omani society. The government considers itself responsible, with all the possibilities and educational institutions at its disposal, to meet each individual's need for education without limitations;
2. Each individual's abilities are to be developed, unrestricted by time or place, in order that each may learn and pursue educational progress all through life. Each individual should be enabled to satisfy his needs for a uniform education covering all aspects of

his personality and making him capable of adapting the environment around him;

3. The necessary manpower for all sectors is to be provided, for the sake of promoting the country's development plans and projects and for providing those facilities and ancillary aids for specialized and higher education as may be consistent with Oman's development requirements;
4. The Omani individual is to be enlightened about his rights, duties, and obligations towards his own country and his larger Arab Motherland, leading to his comprehension that unity and collaboration among the Arab people are sources of power for him; and
5. The individual's ability to make use of his leisure time in useful and beneficial pursuits is to be encouraged, by means of creating suitable activities aimed at insuring the welfare and progress of both the individual and the society in which he lives.

There were several influences which were instrumental in generating the goals of education for the primary, preparatory, and secondary levels. The framework for the educational objectives and ambitions was formed by the prevalent social and economical trends and the Omani philosophy of education. Developmental needs of the learners, along with the discoveries in educational psychology and learning theories, were integrated into the objectives for the various levels of education. Knowledge in the present era is characterized by the scientific and technological aspects. The communications revolution facilitated access to information that created an explosion

of new ideas, techniques, and life styles. Also influential was the ambition of the Arab nations to provide an equal educational opportunity for each member of the society to enhance functional learning to achieve the development plans of the Arab countries. Thus, the process of Omani education was centered on both the individual and his society, rather than only one of these, in order to satisfy the needs of both.

GOALS OF EDUCATION IN THE OMANI SECONDARY SCHOOL

Secondary school is the last level of the infrastructure of Omani education because it is available to all students from the age of sixteen to eighteen. It is of dual importance because some students do not pursue further education upon completion of secondary school. These three years of formal education must provide the skills and competencies for these individuals to join the work force. In addition, the secondary school must also provide the knowledge and study skills necessary for those individuals who will progress to higher education. Within the educational framework, the goals of education for the secondary school were designed to actualize the physical, intellectual, humanistic, and spiritual development of the student; to foster understanding of societal and universal responsibilities; and to develop national pride.

The actualization of physical growth and development was provided by the objectives that promote the acquisition of knowledge of the biological development and functions of the individual along with recognition of the individual physical differences of others; the

assimilation of the rules of personal and public hygiene, nutrition, fitness, safety, and measures to prevent diseases; and the integration of the attitudes of patience, endurance, courage, and fairness while participating in various sports as a means of developing psychomotor and manipulative skills which improve an individual's preciseness, speed, and coordination. Intellectual development was served by the objectives that emphasize the acquisition of perceptual acuity through the assessment of experiential situations by which the learner discovers an understanding of himself, his society, and life in general; the practice of the deductive and inductive modes of thinking to gain knowledge, make discriminative choices, solve problems, evaluate outcomes, and generate analyses and syntheses; the development of verbal skills through listening, reading, writing, and speaking; and the application of the individual's competencies and skills in reading, writing, and mathematics to everyday situations and problems. Further, the intellectual objectives stressed the development of creativity and self-motivation.

To accomplish the development of the spiritual and affective domain of the learner's personality, the objectives stressed the acquisition, comprehension, and practice of the principles of Islam in his daily life; development of self-confidence to overcome fear, frustration, and failure; loyalty to his country and his Sultan; appreciation of beauty in all its facets in nature, music, art, and literature; adoption of the scientific method of thinking by reserving judgments prior to objectively investigating and evaluating situations; appreciation for the value of the individual and collaborative

accomplishments; and enlightenment towards the Universe, life, and all men of the world.

The development of the societal domain of the learner's personality was provided by the objectives which develop moral and ethical principles of honesty, courage, honor, sincerity, and loyalty to engage in social interactions; knowledge of the heritage, progress, and future aspirations of Oman; preservation and conservation of the environmental resources; respect for the dignity of manual, technical, and professional work for the welfare of Oman; unification of Oman with the Arab world; and perception and comprehension of the necessity for mutual interactions between the Arab Islamic civilizations and other existing civilizations.

To transform the general goals of the secondary school curriculum into instructional objectives and materials, the Ministry of Education and Youth in Oman contracted with a group of seven qualified Jordanian educators. The new trends in educational psychology and learning theories, along with the Oman philosophy of education and general aims and goals, formed the basis for formulating the objectives for each subject matter area, designating the content for each level, writing the textbooks and teachers' manuals, and planning the teacher training programs. During this process, the textbooks were submitted to subject area committees to elicit comments for revision purposes prior to finalization of the textbooks and other instructional materials.

General Objectives of the Islamic Education Curriculum

1. To complement education of the integrated Islamic personality which develops the whole person--physically, spiritually,

intellectually, and behaviorally.

2. To emphasize a conscious faith and beliefs demanded by Islam that will reinforce self-confidence and provide intellectual rationales thus giving direction for the student's growth and behavior.
3. To develop and firmly establish student's loyalty to God, belonginess to the Islamic nation, pride in Islam as a belief, and way of life, and the perfect means to make man happy as an individual, a member of a group or a community, or a nation.
4. To emphasize the firm relationship of the Muslim to his Lord and to develop a sense of self-control and the knowledge that God knows all man's spoken and practical actions.
5. To reinforce the presumed behavior of complying with Islamic traditions and to work on remodeling individual or group behavior that does not conform to the principles and teachings of Islam.
6. To develop those attitudes from the teachings of Islam that will best help develop a Muslim generation capable of facing contemporary challenges and demands.
7. To deepen the conviction that the bond of belief is the strongest bond and that unity must stand on unity of belief as a thought framework and on Islamic brotherhood as a social structure that encompasses all Islamic societies regardless of their locations or origins.
8. To emphasize the individual duty of every Muslim, male and female, to build and protect the Muslim society, Jihad in all forms, is the only way to liberate parts of the Islamic nation which fall under non-Islamic rule; to demonstrate Jihad examples from the

life of the Prophet Muhammad and his companions in constructing and protecting the Islamic society.

9. To emphasize the duty of the individual and state to disseminate Islam's message.

10. To present the perfect model of Islamic personality as represented by the Prophet Muhammad. This personality affirms equality and justice, is free from psychological disturbances or contradictory behaviors, and exemplifies the life and leadership of the Prophet, his companions, and other commendable ancestors of the Islamic nation.

11. To develop an awareness of the general sources of Islamic Law (Shari'a) and, in particular, the Q'uran and the Hadith in order to firmly bond the students to these sources and to enable the students to comprehend, appreciate, and learn them during this level of study and after.

12. To teach the students from the Q'uran the Hadith, Islamic Figh, and other sources of Islamic culture. These teachings empower the students to resolve daily problems according to Islamic Law and rules, knowledge which should enable the students to distinguish consciously their rights, duties, and to know what is allowed and prohibited in life.

13. To have the students read correctly and recite the Q'uran in the manner of "tajweed reading" with the objective of developing the students' appreciation and willingness to read the Q'uran and Figh; also, to develop through these readings an understanding of its material and to interpret and memorize some Q'uranic verses.

14. To study and memorize a group of the Prophet's Hadiths which deal with topics and problems important to the individual and society.
15. To familiarize the student with Islamic systems which illustrate the superiority of Muslim traditions; to reprove adherence and illustrate the disadvantages of man-instituted rules and regulations in order to withstand intellectual and cultural assimilation that Muslims may be exposed to in contemporary life.
16. To form and develop sound scientific attitudes as encouraged by the Q'uran and Hadith through liberating the minds of students from the phenomena of compliance and imitation and to direct them toward constructive self-criticism, creativity, and renewal, all within the framework of Islamic thought.
17. To work toward strengthening the bond of the student with different sources of knowledge so that they become able to maximize self-learning to direct them to appreciate learning. This objective emanates from Q'uranic verse 114 in Surah Taha "...O my Lord! advance me in knowledge." To provide the students through application of curriculum content with abilities and skills that will enable them to realize the objectives of self-learning.

Specific Objectives of the Islamic Education Curriculum

1. The Q'uran
   a. To recite surahs from the Q'uran with consideration to the rules of recitation. To direct the student to continue recitation by himself.

b. To know, in a general manner, the meanings of specific ayahs (verses) and surahs from the Q'uran.

c. To memorize verses of the Q'uran after interpreting them.

d. To react with the meanings implicit in verses and surahs of the Q'uran.

e. To differentiate between good and bad manners in order to display the former and avoid the latter.

f. To establish firmly zealousness in spreading the message of Islam and in teaching Islam to others.

g. To work toward resurrection of Islamic life.

h. To manifest devotion of the Q'uran.

2. The Nabawi Hadith

a. To know the stages of the recording of the Hadith.

b. To be familiar with the most prominent narrators and reciters of the Hadith.

c. To know famous concepts and terminology of the Hadith.

d. To study and memorize different aspects of human life illustrated in the Hadith.

e. To know the rules and directions inferred from appointed Hadiths.

f. To hold the values and attitudes embodied in selected Hadiths.

g. To strengthen the relationship with the Sunnah Nabawiya (Prophet's Tradition) as a source of knowledge, values, and direct behaviors.

3. The Beliefs

   a. To strengthen faith by making religion fundamental to every human.

   b. To understand the unity of belief in all heavenly messages.

   c. To recognize the effect of belief on self and society.

   d. To react and behave in a manner consistent with the above mentioned beliefs.

   e. To emphasize that the Q'uran is the only Holy Book that God protected against change and that no modification be made.

   f. To purify minds from mysticism and illusions by emphasizing objective thoughts that treat this aspect of purification.

4. Fiqh (Science of Islamic Law)

   a. To be informed about the source of Islamic legislation.

   b. To have knowledge and an understanding of the rules of worship.

   c. To be familiar with Fiqh teachings on human interactions to establish successful relationships.

   d. To establish commitment and application to practical Islamic laws.

   e. To understand Fiqh terminology, especially Fiqh and legislative rules.

5. The Seerah Nabawiya of Prophethood

   a. To become familiar with the people and their beliefs in the period of history that preceded the revelation of the Prophet Muhammad.

   b. To comprehend the importance of studying the Prophethood

Seerah.

c. To become knowledgeable about the life of the Prophet Muhammad before his receiving the message of Islam.

d. To know the stages of the Islamic Movement in Mecca and Madinah.

e. To follow the examples spelled out in the Seerah of the Prophet Muhammad.

f. To reinforce the spirit of Jihad (struggle) and work for Islam.

g. To establish firmly in the hearts the love of Prophet Muhammad.

h. To develop an awareness and integration of the personality of the Prophet Muhammad and his religious, intellectual, political, and military leadership qualities.

i. To instill love of the companions of the Prophet and to follow their examples.

6. Islamic System

a. To reinforce belief in Islamic system, its comprehensiveness, and ability to meet life's demands as a means to provide for problem solving and to distinguish the Islamic system's character and values from all man-instituted systems.

b. To develop an awareness and understanding of the family structure and the role of women in the Islamic social system.

c. To provide an integrated Islamic curriculum.

d. To interact with the Islamic moral models.

e. To develop an awareness of the fundamental rules and

characteristics of the Islamic political system.

f. To develop an awareness of the Islamic economic system.

General Objectives of the Arabic Language Curriculum

1. To develop the students' comprehension through reading and listening and students' communication skills through writing and speaking.
2. To help the students assume the responsibilities of good citizenship and to continue higher education studies.
3. To strengthen the pride of the students belonging to the Arab and Islamic nation and to nurture emotions and a sense of humanity.
4. To strengthen the faith of the students in the Arab and Islamic nation; in order, to help them develop, progress, and meet the challenges of life.
5. To strengthen the pride of the students as citizens of the Sultanate of Oman, the Arab-Islamic country with an ancient history and excellent world position.
6. To help the students to understand objectively the local society and recognize its characteristics and present importance at the Arabic, Islamic, and world-wide levels.
7. To develop the students' open-mindedness toward the achievements of culture and civilization along with developing the ability to analyze these achievements and utilize models of excellence.
8. To develop the students' appreciation of the Arabic language,

as the language of the Q'uran, and of Arabs who have contributed to the human civilization thus trusting the Arabic language to contribute knowledge to meet the demands of contemporary civilization.

9. To develop the students' comprehension of models that represent the eloquence of eternal literature; e.g., the Q'uran and the Hadith.
10. To develop the students' ability to recite poems and to read aloud in an expressive manner from the Q'uran.
11. To develop the students' linguistic skills in order to memorize the classical literature that will enable them to use suitable forms of expression in various social and psychological situations.
12. To increase the students' comprehension and appreciation of the aesthetic qualities of literary texts.
13. To develop the students' comprehension of the basic rules of objective criticism to foster eloquence in presentations, discussions, and debates.
14. To develop the students' recognition of the Books of Interpretations (Tafseer), the Hadith, encyclopedias, and reference books in Arabic literature to utilize their content in their daily activities.
15. To foster the habit of reading for knowledge and pleasure so that students are motivated to become life-long learners.
16. To stimulate students' literary interests and linguistic skills to develop creative expression.

17. To develop an awareness of the specific characteristics of the genre of the literary arts.

General Objectives of the English Language Curriculum

1. To provide the student with a foundation of skills to enable him to communicate orally and in writing with native and non-native speakers of English both in Oman and other countries with an emphasis on appropriateness of language to particular situations and contexts, in varying degrees of formality and informality.
2. To read for pleasure novels and stories within, or just beyond, the vocabulary and syntax which is familiar to the students and to extract information from a variety of texts, newspaper articles, letters, and other forms of media.
3. To write legibly in cursive script to fill out forms and write letters of inquiry and letters to friends and to write simple paragraphs describing events, giving instructions, explaining a process, asking and stating facts, and asking and stating opinions.

Specific Objectives of the English Language Curriculum

1. Speaking

   To be able to communicate with reasonable accuracy, effectiveness, and ease with a native English speaker.

2. Listening

To develop the students' aural comprehension skills and expose them to a variety of speech styles and a range of non-extreme accents.

3. Reading

   To introduce the students to a variety of text types and to develop effective reading strategies, such as scanning, skimming, and prediction as well as awareness of various cohesive devices and the function of discourse markers.

4. Vocabulary

   To develop the students' skill in inference of meaning from context and to increase awareness of the structural and morphological clues and word families.

5. Writing

   To develop the skills to write simple letters and dialogues, to keep legible notes of materials learned, and write a 100-word paragraph.

6. Study Skills

   To develop the students' skills in using references, dictionaries, and interpretation of diagrams to text all within the context of the tasks of the language lesson.

General Objectives of the Mathematics Curriculum

1. To comprehend the contribution of mathematics to the application of natural phenomena.

2. To utilize mathematical methods in research, analysis,

interpretation, and decision-making.

3. To identify the contributions of mathematics, as a science and as an art, to the cultural and civilized heritage of society and the nation.
4. To prepare students for careers that require or are enhanced by mathematical training.
5. To utilize mathematical language in intellectual and cultural, conceptual transactions.

Specific Objectives of the Mathematics Curriculum

1. To develop students' awareness of the mathematical language which consists of components of facts, concepts, and rules with respect to the role that mathematical symbols provide such as accuracy, clarity, and conciseness.
2. To develop students' use of mathematical language to express and communicate thoughts accurately and clearly.
3. To develop the students' understanding of the nature and logical structure of mathematics and its contribution to human knowledge.
4. To develop the students' calculation skills which promote accuracy, comprehension, and efficiency.
5. To develop the students' logical-thinking abilities for problem solving.
6. To develop the students' understanding of his environment through the study of mathematical models, geometric figures, relationships, and principles.
7. To develop the students' ability to utilize new methods of

collecting, organizing, and demonstrating data through such methods as statistical means, flow charts, and graphs.

8. To develop the students' appreciation of beauty and coherence of geometric figures and mathematical structure.
9. To develop the students' acquisition of a positive attitude toward scientific methods and problem solving.
10. To foster a positive attitude and motivation for students to continue mathematical studies.
11. To encourage the students to acquire mathematical skills to enhance the study of science and other subject matters.
12. To encourage the students to acquire mathematical skills to continue further studies in specialized fields of study.
13. To develop the students' perceptions of the social and cultural role of mathematics and their contributions to the progress of the nation, society, and culture.

General Objectives of the Science Curriculum

1. To develop students' comprehension of the holistic approach to scientific knowledge and to the Universe in general.
2. To develop the students' awareness of practical application of scientific method to develop concepts, skills, and a positive attitude.
3. To develop the students' awareness that their local environment will present continuous challenges and to develop their ability to solve problems.
4. To develop the students' utilization of the scientific method in

critical thinking and research methods to encourage independent learning.

5. To develop the students' divergent and creative thinking skills as a method to adapt to future conditions.
6. To promote the science curriculum at the secondary level to accommodate students' developmental and psychological needs.
7. To develop the students' awareness of a simplified, coherent approach to the latest scientific knowledge.
8. To develop the students' awareness of the integration of scientific knowledge and religious beliefs as complementary to the students' faith in God.
9. To develop for the students an integration of educational philosophy, objectives of the secondary curriculum, and the social and economic development of Oman.
10. To provide a comprehensive science curriculum to meet the needs of secondary students who will enter the workforce.

General Objectives of the General Science Curriculum

1. To develop the students' reflection on natural phenomena in the Universe in relation to the oneness of God and his power and greatness.
2. To develop the students' ability to use scientific thinking, method, and problem-solving skills.
3. To develop the students' appreciation of the efforts and contributions of scientists to the progress of civilization.
4. To develop the students' perception of the effects of science and

technology on contemporary society.

5. To develop the students' comprehension of the science perspectives: methods of thinking, research procedures, and interpretations.
6. To develop the students' inductive and deductive approaches in scientific experimentation, measurement, and conclusions.
7. To encourage the students to develop appreciation of scientific readings.
8. To develop the students' psychomotor and cognitive skills through the performance of scientific experimentation and construction of simple apparatus.
9. To develop the students' understanding of the relationship between science and their religious beliefs.
10. To promote the students' understanding of the relationship between science and their environment.
11. To encourage students to develop their individual ideas as well as their responsibility for the consequences of their actions.
12. To encourage the students to develop a comprehensive, holistic perspective of scientific knowledge.
13. To encourage students to develop divergent and creative thinking processes.

General Objectives of the Chemistry Curriculum

1. To reinforce the students' belief in God and the perception of His power and greatness through the study of the characteristics and behavior of substances and the relationship and laws that bind

them in an organized and cohesive system.

2. To develop the students' appreciation of the role of chemical scientists and their contributions to the development and progress of societies.
3. To develop the students' application of a non-prejudicial objectivity through the application of the scientific method.
4. To develop the students' ability to delay judgment by utilizing scientific procedures, e.g., making observations, collecting and analyzing data, and arriving at conclusions and generalizations.
5. To promote the student's valuing the role of chemistry in developing natural resources and industrial development.
6. To develop the students' interpretation of scientific facts in a systematic approach through the knowledge of chemistry as a body of laws of nature, concepts and basic principles.
7. To foster the development of students' objective discussion, logical thinking, and performance to develop an interest in the principles and complex concepts of chemistry.
8. To develop the students' skills in report writing through effective use of the library, interviewing techniques, and field visits to industrial sites.
9. To develop the students' skills to infer scientific information through visual media and events.
10. To develop the students' psychomotor skills through the training and utilization of chemical apparatus and tools.
11. To prepare students, upon graduation from secondary school, to integrate their knowledge of chemistry in their workplace or

higher education.

General Objectives of the Physics Curriculum

1. To develop an understanding of scientific concepts and acquisition of knowledge of physics to enable the student to:
    a. Interpret phenomena and solve problems to live in harmony and coherence with the phenomena in the environment
    b. Adapt to changes occurring in the environment
2. To provide the student, at the end of the secondary level, with appropriate scientific knowledge to function as a citizen capable of adapting to scientific and technological development.
3. To enable the students to acquire basic requirements for higher education in scientific disciplines.
4. To develop the students' appreciation of the contributions of Arab and Muslim physicists in the development of physics and civilization.
5. To develop the students' acquisition of the following skills:
    a. To analyze physical phenomena and their relation to other disciplines.
    b. To classify and organize physical information in a comprehensive way in order to deduct accurate conclusions from it.
    c. To apply information from previous experiences in the study of physics to solve new problems.
    d. To anticipate the use of available information.
    e. To make accurate observations.

f. To perform experiments and use and maintain equipment properly.

g. To draw and use graphs to deduct appropriate relationships among variables of specific phenomena.

h. To write reports of field visits to factories and industrial sites and of laboratory experiments through effective use of the library resources.

i. To use the laws, concepts, and theories of mathematics to express physical relationships.

j. To solve the exercises and problems in physics by applying the concepts and laws of physics the student has learned.

6. To develop the students' values and sound scientific attitudes such as:

a. To think objectively and to respect the opinions of others.

b. To appreciate inquisitiveness, research methodology, and acceptance of new facts.

c. To develop the perception that scientific knowledge is not static, but changeable, modifiable, and substitutable.

d. To actualize self-dependence and trust.

e. To practice scientific objectivity and honesty.

f. To appreciate the beauty in nature through the inter-relations of natural and physical phenomena which reflect the greatness of God and His infinite power in creating and organizing the universe.

g. To accept causality and refute myths.

h. To foster cooperation and enjoyment of group work.

i. To respect scholars and appreciate their efforts.

j. To respect work and workers.

k. To appreciate the important role of physics in developing civilization.

General Objectives of the Biology Curriculum:

1. To provide fundamental knowledge in biology, such as facts, concepts, principles, assumptions, and laws from a functional perspective to enable the student to understand, interpret, and adapt to environmental phenomena and changes.
2. To develop positive attitudes and values in order to examine biological phenomena with trust and objectivity based on scientific proofs.
3. To develop the scientific method of thinking and practice as well as creative abilities.
4. To acquire basic psychomotor, cognitive, and social skills from a functional perspective.
5. To develop appropriate scientific interests to instill appreciation of science and the accomplishments of scientists, especially, Arab and Muslim scientists.
6. To develop the habit of reading to increase knowledge and to be cognizant of the latest scientific developments in biology.
7. To develop an interest in continuing further studies at the university or other higher education studies.
8. To develop respect and appreciation of the value of manual work and to assist the student in making appropriate career decisions.

9. To identify the natural resources of the Sultanate of Oman and their preservation and importance in raising individual and social standards of living.
10. To develop positive attitudes toward environmental preservation and nature's equilibrium to prevent exploitation of natural resources.
11. To develop a perception of the orderliness of living systems and the universe that reflects the Greatness of God and his absolute power.

General Objectives of the Social studies Curriculum
(History, Geography and Contemporary Problems, Civic Education, and Human Culture)

Objectives and Social Studies Curriculum

A. The Affective Domain

1. To develop an awareness of the student's relationship and interaction with the community and society at large.
2. To develop nationalistic pride and human worth through work, contribution, sacrifice, martyrdom, and self-denial.
3. To recognize the responsibilities required by the Islamic nation in general, and Arabs in particular, to resist colonialism and Zionism and to solve social and economical problems at this critical period of history.
4. To develop awareness of family.
5. To reinforce the students' faith in Islam as a belief, law, and way of life.

6. To foster the enjoyment of reading original text and illustrations.
7. To enhance the students' pride in Islamic and Arabic values.

B. The Cognitive Domain

1. To utilize the newly developed knowledge related to Social Studies.
2. To comprehend and utilize social concepts, principles, and generalizations as opposed to the application of random information.
3. To develop the cognitive processes by utilization of an integrative approach to the various topics of Social Studies.
4. To comprehend the interaction of man and his social and natural environments.
5. To utilize the human and material resources available in class, school, and the local environment to achieve the expected educational and instructional objectives.
6. To study the environment to identify the post-secondary opportunities available in the scope of work and daily living.
7. To study scientifically the preservation of the environment to propose ways to serve, maintain, and conserve the environment.
8. To study, through independent-learning, cultural changes involved in community material or moral changes.

9. To integrate formal and informal education through utilization of information related to the various components of Social Studies.
10. To comprehend the social, economic, and political progress of the Sultanate of Oman and its mission of building an independent and free Arab world.
11. To comprehend the philosophy of the Sultanate of Oman in the current context of common issues and solutions based on the history and culture of Oman as well as the heritage and contemporary characteristics of Arabs.
12. To comprehend, through independent learning, the problems and developmental project of the local society.
13. To develop the students' general education in different disciplines to become a viable citizen.
14. To develop behaviors to ensure conservation and protection of the environment against pollution.

C. The Psychomotor Domain

1. To perform scientific activities to acquire basic skills to enable the student to meet his needs and the needs of society for human resources.
2. To perform learning activities, such as chairing an open discussion, performing research, conducting surveys, writing reports, training sessions, solving exercises, surveying a tract of land, and utilizing textbooks.
3. To utilize the school library to enrich, reinforce, and increase the interaction of classroom learning.

4. To organize field trips and participate in the celebration of religious, local, national, and international events to achieve meaningful educational outcomes.
5. To draw maps and graphs and build models of different geographical phenomena and to analyze these to form functional conclusions.

THE DESIGN OF THE OMANI CURRICULUM

During 1976-1977 curriculum designers translated the goals and objectives into educational practices, student textbooks, teachers' manuals, and other educational materials. By 1977-1978, curriculum development had progressed to specialized committees for subject matter areas. These committees designed twelve curricula, wrote numerous student textbooks, and teachers' guides for the secondary level according to the curriculum development process recommended by Farhan et al. (1985).

Weekly meetings were held by the subject area committees and the Omani Committee on Curriculum Development. The subject area committees designed the curriculum as an outcome of studying the Omani values and social norms, philosophy of education, previously utilized educational outlines, and the policy for the growth and development of the Sultanate as indicated in the speeches of His Majesty Sultan Qaboos. In addition, the subject area committees analyzed comparative curricula from neighboring Arab countries and studied the most recent trends in curriculum development. The Omani Committee on Curriculum Development

met to assign the work to the subject area committees, supervise the revision of the preliminary drafts of the textbooks, teachers' manuals, and materials produced by the subject area committees, and develop the process for implementation of the curriculum.

INTRODUCTION OF THE NEW OMANI CURRICULA TO THE EDUCATIONAL PERSONNEL

At the beginning of the 1979-1980 school year, a conference was held for the personnel who would direct the implementation of the new curriculum and educational materials. It was determined that the subject matter teachers, supervisors, and school headmasters were the crucial personnel for successful implementation of the new Omani curriculum. Further, it was stipulated that familiarization with the new curricula would be the first step of the process to insure that the classroom teacher understood the characteristics and features of the curriculum, the textbook, and teachers' manuals. Therefore, it was crucial to develop a plan to train the teachers in the effective use of the student textbooks, teachers' manuals, testing program, teaching aids, and yearly and daily lesson plans to successfully implement the curriculum. Farhan et al. (1985) in a report of the conference determined that implementation should be facilitated by carrying out the following recommendations.

A. The Department of Teacher Training should meet with the Educational Directors of the school districts to identify the centers for training in each district, designate from the Curriculum Department the supervisors and specialists to

conduct the training sessions, and specify the length of time and the dates for training. Seminars, training sessions of two-to-three hours duration, group discussion of the content of the textbooks, visitations to other classrooms to observe implementation of the curricula should be the primary delivery strategies. The inclusion of new math concepts in the curriculum would necessitate special bi-weekly meetings for these teachers. In addition, school headmasters should attend a workshop to develop the competencies to perform as resident supervisors of the curriculum implementation. It was recommended that documentation of the proceedings of this conference should be printed in a booklet for distribution to all schools to be available to teachers and educators.

B. To improve the evaluation process, the Department of Examination, in cooperation with the personnel of all strata of the Omani educational system, should assume the responsibility for training teachers in techniques to utilize the data from objective testing in either a diagnostic or remedial manner. This should be a high priority item because objective tests were the assessment method built into the new Omani curriculum.

C. Teaching aids which reflected the local environment should be integrated into the new Omani curriculum and would necessitate the Department of Curriculum, along with the cooperation of the subject matter specialists, supervisors, and teacher trainers, to produce a list of suggested teaching

aids for each subject matter at each grade level with instructions indicating how to produce the teaching aids and how to utilize them to maximize learning.

D. Teachers should be assisted in preparing their yearly plan of teaching so that the environmental, psychological, and educational elements would be incorporated with the guidelines from the teachers' manuals. In addition, preparation of daily lesson plans should not only reflect the educational principles suggested in the teacher's manual but also include various models of instructional delivery.

E. To provide for enrichment of the new Omani curriculum, it would be necessary for the schools to provide reference material, journals, magazines, and books. On a trial basis the use of a rotating library for enrichment purposes was suggested for some of the school districts. Also, all science classes in the Schools of Oman should be provided with the materials, teaching aids, and laboratory equipment necessary to implement the science curriculum.

F. It was recommended that training should focus on the new curriculum and the teacher's manuals for the students.

G. The Departments of Curriculum and Teachers Training should provide orientation to the new curriculum for teachers recruited from other Arab countries prior to their placement in the schools.

H. The recommendation that would provide the foundation for implementation was that a unified opinion in relation to the

up the new material during the successive years of implementation of the new Omani curriculum. This provided limited formative evaluation; in that, through a less stringent means, the Department of Curriculum gathered adequate information to modify student textbooks and teachers' manuals for the new yearly printings.

STATEMENT OF THE PROBLEM

The Omani curriculum designed for the secondary schools has been utilized for the past eight years. At this time, it is necessary to evaluate the curriculum of the secondary subject matter areas: Islamic Education, Arabic Language, English, Mathematics, General Science, Chemistry, Physics, Biology, Social Studies (History, Geography, Civic Education and Human Culture, and Contemporary Problems). Evaluation of the curriculum is especially important because neither a formative model of evaluation was proposed or followed during the process of the design of the curriculum and production of materials nor a summative model of evaluation was proposed and utilized during the implementation of the curriculum.

PURPOSE OF THE STUDY

Therefore, the purpose of this present study is to evaluate the curriculum to identify its strengths and weaknesses with respect to objectives as stated by the designers of the Omani curriculum. More specifically, the focus is on the perception of the curriculum objectives by the teachers, supervisors, and school administrators as implementors of these objectives that were defined by the designers. Curriculum development is a dynamic process; therefore, from the

> Omani curriculum should be presented by the curriculum specialists and the supervisors from the Ministry and the school districts. All personnel should work as a team in presenting the various activities in teacher training, testing, and teaching aids. Specialists from the Ministry should be a part of in-school activities to observe the process of implementation. Further, it would be possible to identify problematic areas and devise strategies to improve the implementation process. This would facilitate cooperation among the various levels of educational personnel.

Although Farhan et al. (1985) indicated that these recommendations were proposed at the conference held during the 1978-1979 school year, the new Omani curriculum was installed directly without any pilot trial of the curriculum materials. Prior to the conference, the drafts of the student textbooks and teachers' manuals had been reviewed by the curriculum specialists and their comments for revision had been forwarded to the Omani Committee on Curriculum Development which supervised any modifications before the materials were prepared in their final printed form. This indicates that implementation of the new Omani curriculum had not proceeded according to the recommendations explicated at the conference.

Therefore, the teachers first became acquainted with the new student textbooks, teachers' manuals, testing methods, and teaching aids when they began teaching the new Omani curricula. However, the Department of Curriculum was assigned the responsibility of following

statistical data of this present study, recommendations will be suggested to reinforce the strengths and to improve the weaknesses that hinder the efficiency of accomplishing the objectives of the curriculum.

SIGNIFICANCE OF THE STUDY

The new Omani curriculum represents an enormous investment in terms of both human and financial resources. The expected outcome from this curriculum is new Omani generations that should have developed qualities, knowledge, and competencies to make important contributions to the economic and social development of the Omani society. Therefore, there is a legitimate need to evaluate the curriculum to determine the extent to which it contributes to the realization of the Omani reform movement.

Further, the rapidity of social, economic, and technological change during the present era may have rendered the Omani curriculum somewhat inadequate to continue the enhancement of development in Oman. As a result, it may be necessary to evaluate and revise continuously the Omani curriculum to make adjustments to the social, economic, cultural, and technological changes in Oman. Therefore, this study should be considered as an initial effort along a continuous pathway of adjustment and improvement of education's role in Omani development.

Chapter 3

REVIEW OF LITERATURE

Definition of Curriculum

Curriculum as a specialized field was initiated in the early twentieth century, more precisely in 1918, with the publication of two major works, Franklin Bobbitt's The Curriculum and the report, Cardinal Principles of Secondary Education, issued by the Commission on the Reorganization of Secondary Principles. The cardinal principles of secondary education were "health, command of fundamental process, worthy home-membership, vocation, citizenship, worthy use of leisure, and ethical character" (p. 10). Educational offerings were to be judged by these cardinal principles. According to this report, the determinants of the objectives of the curriculum should be

> the needs of the society to be served, the character of the individuals educated, and the knowledge of educational theory and practice available. (p. 7)

Therefore, schools should derive their goals from the activities of the adults in society. Bobbitt's The Curriculum featured his idea that curriculum is defined by studying the activities of man to discover what forms of knowledge individuals need to know. Six years later, in 1924, Bobbitt published How to Make a Curriculum which identified 821 objectives for the curriculum writer. At this point, the emerging field of curriculum development became the dynamic force in teacher education, and curriculum revision at the local school level fostered teacher retraining.

The amorphous nature of the word "curriculum" reflects the wide variety of definitions suggested by various specialists who espouse diverse philosophical beliefs. However, some curriculum specialists with narrow perspectives hold to curriculum as subject matter areas taught in schools. Carter V. Good (1973), in his Dictionary of Education, describes curriculum as "a systematic group of courses of sequences of subject matters required for graduation or certification in a major field of study, for example "Social studies curriculum, Science curriculum...etc." Others have subscribed to more inclusive definitions. Hollis and Campbell (1935) defined curriculum as "all experiences children have under the guidance of teachers" (p. 66). Albert Oliver (1977) viewed curriculum in four parts: "the program of study, the program of experience, the program of services, and the hidden curriculum" (p. 8). This change to a more inclusive definition was clarified by Doll (1978) in his statement that

> The commonly-accepted definition of the curriculum has changed from content of courses to study and lists of subjects and courses to all the experiences which are offered to learners under the auspices or direction of the school. (p. 6)

Over the years specificity of structure, function, and aims refined the definition of curriculum. Ronald Doll (1978) emphasized function in his definition of the curriculum of a school as

> the formal and informal content and processes by which learners gain knowledge and understanding, develop skills, and alter attitudes, appreciations and values under the auspices of that school. (p. 6)

Structure was featured in Taba's (1962) definition that

> All curricula, no matter what their particular design, are composed of certain elements. A curriculum usually contains a statement of aims and of specific objectives; it indicates

> some selection and organization of content; it either implies or manifests certain patterns of learning and teaching whether because the objectives demand them or because the content organization requires them. Finally, it includes a program of evaluation of outcomes. (p. 10)

Mauritz Johnson, Sr. (1967) best highlighted the aims perspective by defining curriculum as "structured series of intended outcomes" (p. 130).

Although a great number of different definitions of curriculum exist, they share an important commonality; curriculum represents a plan for action and not the action itself which is instruction. Many specialists have attempted to emphasize the distinction between curriculum and instruction. Johnson (1967) used the implementation criterion to divide them by pointing out that "curriculum prescribes (or at least anticipates) the results of instruction and does not prescribe the means" (p. 130). Conversely, Taba (1962) viewed curriculum and instruction as two ends of a continuum and concludes that "where to draw a dividing line between them is relatively flexible and a matter of subjective judgment" (in Razik, 1974, p. 130).

A. CURRICULUM DEVELOPMENT

If curriculum is considered as a plan for providing adequate learning experiences for learners in formal educational settings, then curriculum development is the dynamics by which this plan is prepared, implemented, and continued progressing toward its objectives and goals. Curriculum describes a product; curriculum development describes the process by which this product is produced. Some specialists prefer curriculum engineering because this title emphasizes the influence of

technology in the process of curriculum development.

The system that represents curriculum development, or engineering, according to P. Oliva (1982), consists of three phases: "planning or design, implementation or action, and evaluation or control and judgment" (p. 25). Arieh Lewy (1978) suggested six stages of curriculum development: "determination of general aims, planning, tryout, field trial, implementation, and quality control" (p. 15). From a systems perspective, it should be noted that these stages are neither hierarchical nor linearly sequential, as some components may proceed parallel to each other or some of the later components may come before the leading components. The whole system may be considered as cyclic.

MODELS OF CURRICULUM DEVELOPMENT

Curriculum development is viewed by most educators as the process of making programmatic decisions and of revising the products of those decisions on the basis of continuous and subsequent evaluation; a model is perceived as giving order to this process (P. Oliva, 1982). Although an abundance of curriculum development models exist in the literature, there is a predominance of similarities among them. The salient differences among the curriculum development models are a result of the individual modelbuilder's emphasis of his or her own points of special interest. Categorization of curriculum development models may proceed according to emphasis on the decision-maker, emphasis on the elements, sequence, and nature of the curriculum development process, and emphasis on the human factor in the change

process.

Smith, Stanley and Shores (1957), using the decision-making criterion to categorize models, identified three categories: the administrative model, the grass roots model, and the demonstration model. Razik (1977) presented an account of these three models but warned that "all models of curriculum development represent theoretical prototypes which rarely, if ever, occur in pure form when put into practice" (p. 6).

The Administrative (Line-Staff) Model

This model was considered by Razik (1974) to be the earliest, most familiar pattern of curriculum development. It utilized a "top-down, line-staff" procedure, and the whole development project was usually initiated by the top-level official, i.e., a superintendent of education in the decentralized educational system of the United States or a Minister of Education in a centralized educational system in many of the developing nations. Upon this official's decision that a program of curriculum development and implementation is necessary, he arranges meetings with key subordinates to form a steering committee ("usually called the high consulting committee in the Arab countries") (p. 7).

The charge of the steering committee is to formulate general plans, develop guiding principles, and prepare a statement of philosophy and objectives for the entire school system. In addition, the steering committee may provide for the selection and organization of working committees to formulate plans, principles, and objectives of

the curriculum, content learning activities, and so forth—all in accordance with the policy guidelines formulated by the steering committee.

Upon completion of the curriculum construction process by the appointed working committees, the documents which they have prepared are reviewed by the steering committee to ensure that these documents conform to the policy guidelines. The steering committee also coordinates the work of the various working committees to ensure the coherence of the scope and sequence of the whole program. In addition, the steering committee makes the necessary amendments to style and form during preparation of materials for publication. The steering committee may supervise the installation of the curriculum or appoint another committee or division to accomplish this task.

In the implementation phase, the committee acquaints the personnel who were not engaged in the production of the curriculum with its philosophy, goals, objectives, and methods and techniques of implementation. The last task of the steering committee, or its appointed subcommittee, is to monitor the effectiveness of the curriculum in schools through class visits, discussion, pupil evaluations, and other means. As indicated by the results of the monitoring process, modifications must be made in the curriculum.

Razik (1974) summarized the weak points of this model by stating that

> since curriculum development in the administrative model is conceived, initiated and directed from the top downward along hierarchical line-staff channels, it has been widely criticized as being undemocratic in principle. (p. 8)

He also added that

> experience with the model has shown that it is not a very effective means for bringing about and sustaining significant curriculum change. The reasons are fairly complex and have a great deal to do with the fact that curriculum change is "people change" and cannot be brought about merely by organizational manipulation. (p. 8)

Zais (1976) criticized the uniformity assumption of the administrative model wherein curriculum change takes place uniformly at a given time throughout the school system. He stated that

> As experience in curriculum programs increased, the concept of change on a "uniform front" was one of the points at which radical modifications occurred. Thus, there developed the concept of change on a "broken front." (pp. 448-449)

As a result of the criticism noted above, the administrative model is rarely advocated among curriculum specialists, yet many school systems use it with varying degrees of authoritarian nomenclatures to "get the job done."

The Grass Roots Model

In contrast with the administrative model, the "grass-roots" model, initiated by teachers in their individual schools, employed democratic group methods of decision making, proceeded on a broken front and was geared to the specific curriculum problems of a particular school or classroom. Razik (1974) determined that

> the intensely democratic orientation of the grass-roots model is responsible for generating what have probably become the curriculum establishment's two least questioned axioms: first, that a curriculum can be successfully implemented only if the teachers have been intimately involved in the construction and development processes, and secondly, that not only professional personnel, but students, parents and other lay members of the community must be included in the curriculum planning process. (p. 10)

Although neither of these axioms has been satisfactorily demonstrated

in practical curriculum development projects, this does not mean to deny the role these groups can play in curriculum development, but refers to the failure of specifying accurately and precisely those roles.

The primacy of the teacher as the key to effective curriculum engineering was based on a Smith, Stanley and Shores' (1957) discussion that

1. The curriculum will improve only as the professional competence of teachers improves.

2. The competence of teachers will be improved only as the teachers become involved personally in the problems of curriculum revision.

3. If teachers share in shaping the goals to be attained in selecting, defining, and solving the problems to be encountered, and in judging and evaluating the results, their involvement will be most surely assured.

4. As people meet in face-to-face groups, they will be able to understand one another better and to reach a consensus on basic principles, goals, and plans. (in Razik, 1974, p. 11)

Razik (1974) determined that

> The primary weakness of the grass-roots model of curriculum engineering is that it applies the method of participatory democracy to a highly technical, complex and specialized process, a one man—one vote rational will not necessarily result in good decision making in situations where it is necessary to bring to bear the authority of specialized knowledge. (p. 11)

He also called for a far more precise definition of the roles and functions of teacher, community, and student groups to ensure democratic decision making without the drawbacks mentioned above. Despite the criticisms against the grass-roots model, it should be noted that it contributed immeasurably to broaden the base of curricular decision making and to increase responsiveness of curricula

to community desires and responsiveness of community to curriculum changes.

The Demonstration Model

Because curriculum changes are usually perceived as threats to the security, status, and general welfare of the people affected by them, the demonstration model introduced these changes on a small scale. Smith, Stanley, and Shores (1957, 1951) identified two forms of the demonstration model. In the first form, a separate unit of teachers was organized within the school and charged with the development of an experimental curriculum project as a research and development team. The newly developed segments of curriculum were presented to their colleagues in the hope that they would adopt the curriculum segments.

It should be noted that this form of the demonstration model was not very different from the administration model in the way that the decisions were made or the way that the teams were formed. The only difference was in the small-scale characteristic of this form.

The second form was less formally constituted than the first in the sense that the change was initiated by a small group of dissatisfied teachers on their own. The more successful units produced through this informal research and development were presented to other teachers in the hope that they would adopt them. It should be noted that this form is not very different from the grass-roots model.

Razik (1974), after Smith, Stanley, and Shores (1957), identified several advantages associated with the demonstration model. First, because the curriculum produced by this approach had undergone testing

in a protected, experimental situation, it could work in a school, or school system, by giving workable alternatives to present practices. Second, changes introduced by this model were in the form of specific, workable segments which tended to mitigate the head-on resistance that often develops in the face of proposals for total or systemwide revisions. Third, the small scale nature of this model facilitates the "broken front" approach to curriculum innovation that avoided the hiatus between document production and implementation that was inherent in the administrative model. Finally, the demonstration model, especially in its grass-roots form, capitalized on the initiative and resourcefulness of teachers and geared the administrative resources to the needs and interests of teachers in the development of new programs.

The principal weakness of the demonstration model lies in the fact that it created new antagonisms to replace the ones that it had avoided. Smith, Stanley, and Shores (1957) noted that

> Teachers who are not participants in the development process perceive the experimenting teachers with suspicion and distrust. Resentments like these don't look well for the adoption of even the most meritorious curriculum innovations. (p. 436).

Razik (1974) suggested, as a remedy to these resentments, that provision for open lines of communication between the participant teachers in the development process and the regular faculty, parents and students must be made to allow participant teachers opportunities to demonstrate to the others the merit of the experimental work in order to prevent, or neutralize, resentments.

Elemental or Sequential Model

In this group of curriculum development models, the curriculum specialists who originated them were not interested in the management and decision-making policies, but in the areas of decision making and the sequencing of processes that in their integrity were called curriculum development, or curriculum engineering. Most of the curriculum designers who fall within this category were of the behavioristic orientation and adopted the systems approach. The learners were considered as an input into the system with the aim of affecting changes to produce an output with a specific characteristic. This operation, in their opinion, was done through a sequence of well-designed processes. The curriculum designers differed in the way they viewed the nature of the sequence as linear or cyclic and whether it proceeded from global processes to detailed ones or vice versa. Four models were encompassed by this category.

Tyler's Model

Considered as one of the best known models with special attention given to the planning phases, Tyler's model was one of the most widely practiced models of curriculum development, especially for the selection of objectives.

In his curricular rationale, Tyler (1949) identified the sources for gathering data to enable the developer to identify a set of potential objectives. These three areas were the learners, the contemporary life outside the school, and the subject matter.

After identifying numerous general objectives from these three

sources, the curriculum planner would refine them by filtering them through two screens: the educational and social philosophy of the school and the psychology of learning. The set of objectives that successfully passed through the two screens became the specific objectives of the curriculum to be developed. Tyler called these objectives goals or educational objectives or instructional objectives. Tyler's curricular rationale is depicted in Figure 2.

Tyler advised the curriculum planners to analyze each of the sources of curriculum objectives as follows:

1. The learners: The curricular planner should analyze data relevant to the learner's total range of needs and interests, educational, social, occupational, physical, psychological, and recreational. This may be done through observations by teachers, interviews with students and parents, and questionnaires and other known tools for collecting data.

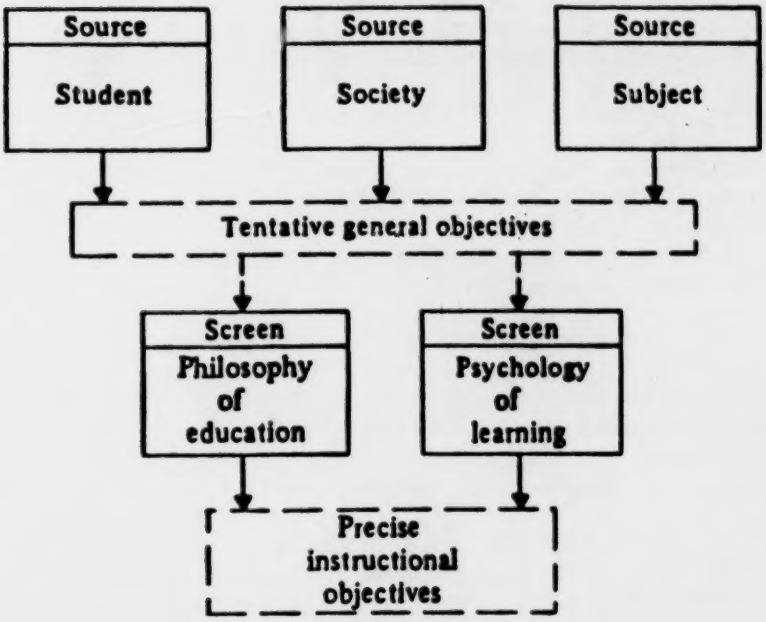
2. The contemporary life outside the school: The curriculum planner should analyze both the local community and the whole society in the areas of health, family, recreation, vocation, religion, and civil roles, to identify the beliefs and traditions, values, and needs of the community on both levels.

3. The subject matter area: The curriculum developer in this area must play the role of a subject matter specialist and analyze the nature, logic, and sequence of the subject matter area.

The philosophical and psychological screening provided by the Tyler model was meant to eliminate unimportant and contradictory objectives.

Tyler urged the curriculum planner to formulate an educational and social philosophy and to outline their values. He illustrated this task by emphasizing four democratic goals. (Oliva, 1982).

FIGURE 2 Tyler's curricular rational



Source: R. W. Tyler, in P. F. Oliva, 1982.

Philosophical Screen

1. The recognition of the importance of every individual human being regardless of his race, nationality, social, or economic status.

2. Opportunity for wide participation in all phases of activities in the social groups in the society.

3. Encouragement of variability rather than demanding a single type of personality.

4. Faith in intelligence as a method of dealing with important problems rather than depending upon the authority of an autocratic or aristocratic group. (Tyler, 1949, p. 33-36)

To apply the psychological screen, the curriculum developer should specify the principles of learning believed to be sound on the basis of adequate knowledge and training in the fields of educational psychology and human growth and development. Tyler explained the significance of the psychological screen in the following three points.

Psychological Screen

1. Knowledge of the psychology of learning enables us to distinguish changes in human beings that can be expected to result from a learning process from those that cannot be expected.

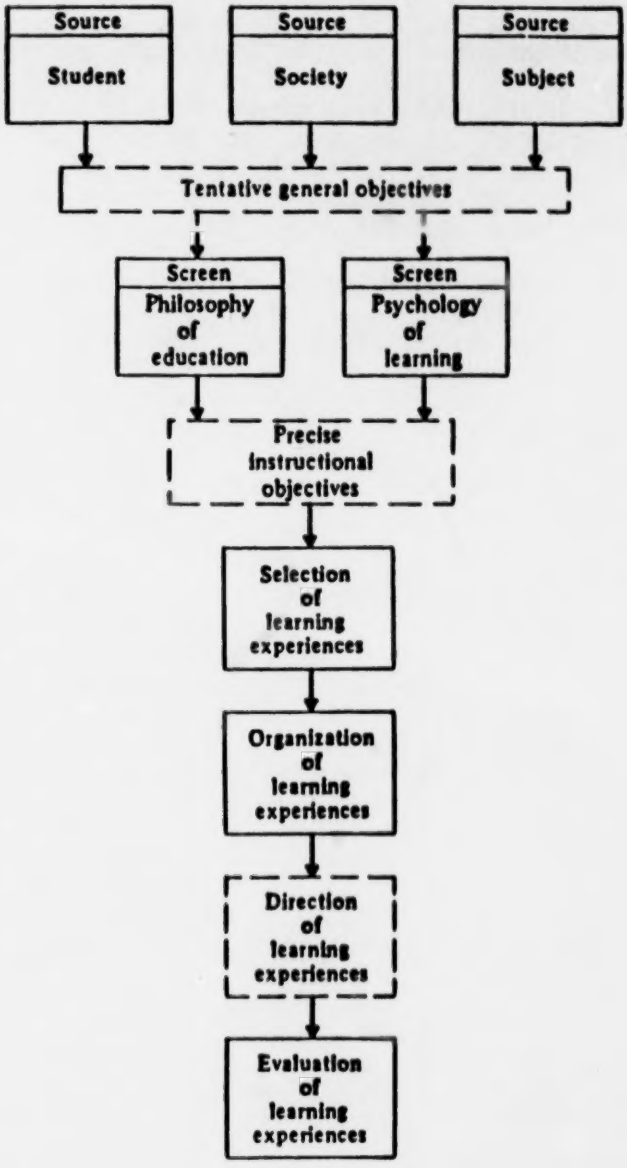
2. Knowledge of the psychology of learning enables us to distinguish goals that are feasible from those that are likely to take a very long time or are almost impossible to attain at the age level contemplated.

3. Psychology of learning gives us some idea of the length of time required to attain an objective and the age level at which the effort is most efficiently employed. (Tyler, 1949, p. 35).

Tyler's model included more planning steps that follow the selection of objectives. These are included in Figure 3.

Foshay, in a paper written in 1961, indicated that there were three critical elements with which curriculum planners must deal.

FIGURE 3 Tyler's curricular rational (expanded)



Source: R. W. Tyler, in P. F. Oliva, 1982.

These were knowledge of the child, knowledge of society, and knowledge of the nature of organized knowledge. Foshay's third element, knowledge of the nature of organized knowledge, marked a shift in thinking about subject matter (Al Ibrahim, 1980, p. 48). Neagley and Evans (1967, p. 6) had called this a shift from subject-centered curriculum development. Their view was that the discovery of discipline as a way of making knowledge rather than learning facts was the central element of this new approach. Bellack described this shift as

> The aim is to introduce students to the universe of discourse, or more grandly the ways of life, represented by the fields of scholarship. Students are to engage in activities patterned after those of practicing physicists, chemists or economists. Whereas formerly factual and descriptive content of the various fields was stressed, now the emphasis is on the basic concepts and conceptual relationships that scholars in the various fields use as intellectual tools to analyze and order their data. (Neagley and Evans, 1967, p. 8)

Many of the innovations of the 1950's, the new match, audio-lingual foreign language instruction, and the plethora of science programs were devised by the subject matter specialists. This demonstrated the impact of Tyler's model on curriculum development in that era. It also indicated the effect of the shift from the concept of subject matter as facts into a discipline with its concepts and processes and conceptual sequencing. This phenomena dominated curriculum development projects throughout the late 1950's and early 1960's.

One of the primary criticisms of Tyler's model, including the modified models that followed his conceptualizations, was that it separated knowledge into separate areas or disciplines. A subject matter area, or discipline, could work on the basis of developing

specific curricula, such as a science curriculum or mathematics curriculum. However, the discipline was not a good basis for designing global curriculum for a level of education, i.e. the primary school. Johnson (1967) emphasized this fact in this comment that "The only possible source [of curriculum] is the total available culture, while the organized subject matter or disciplines can only be considered a source of curriculum items" (p. 132). By his comment, Johnson considered a curriculum in a specific subject matter area as an item in the whole, or global, curriculum for a level of schooling. Tyler's model was lacking the integration of the three types of knowledge.

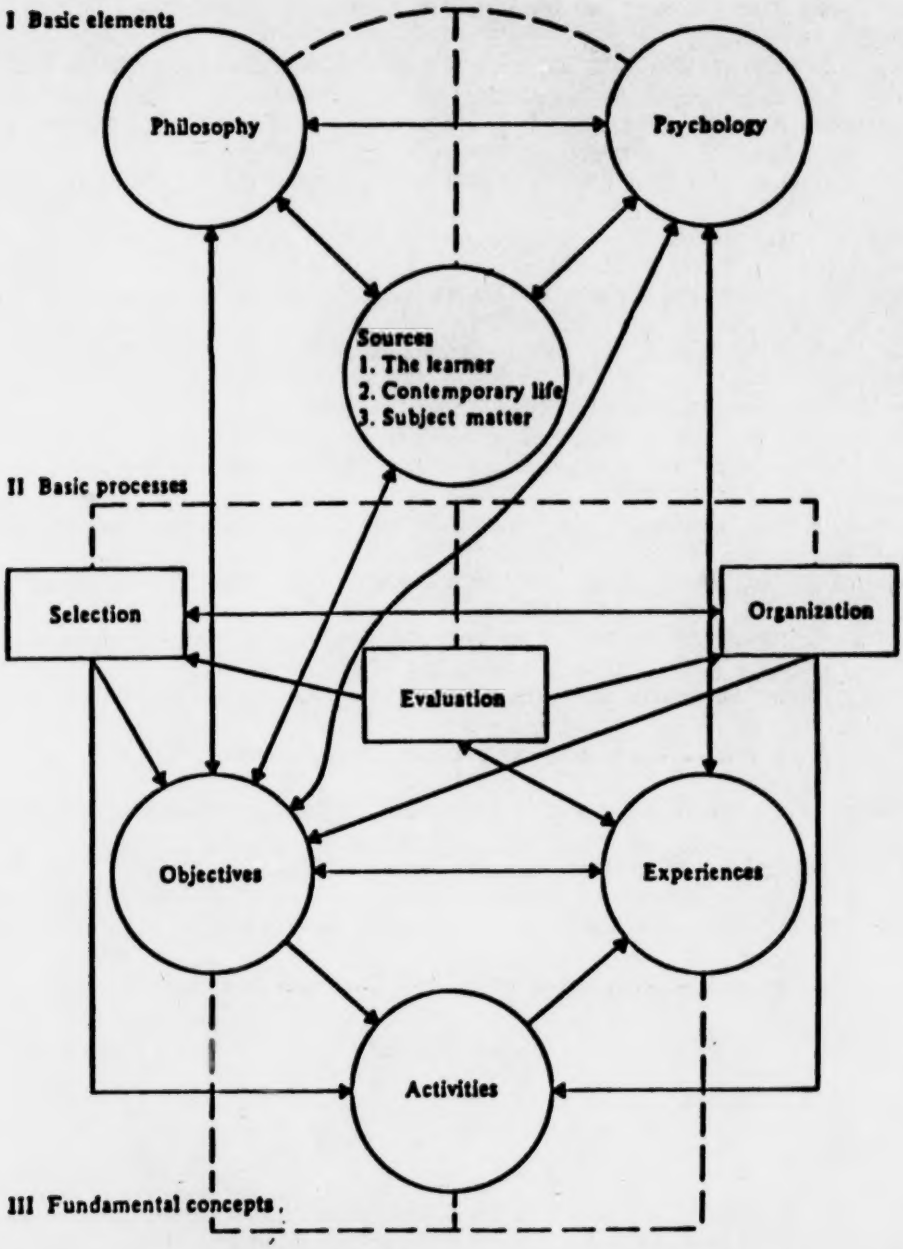
Another criticism of Tyler's model lies in its linearity as indicated by Soto, who in cooperation with Tyler, in 1969 developed a model that eliminated the linearity and identified the inter-relationships among the variables of the system as shown in Figure 4. Soto's model is characterized by the following features

1. It commences with the two screens instead of the three sources of knowledge.

2. It distinguishes between three fundamental concepts: objectives, activities, and experiences, and defines each of them. He defined objectives as the combination of experiences that the learner attempts to achieve and defined experiences as the behaviors written into the objectives. Activities, in Soto's definition, were those experiences that the learner undertook to achieve the expected behaviors.

In his model, Soto showed that objectives and activities were selected and organized, but only experiences, i.e., terminal behaviors, were evaluated.

FIGURE 4 Leyton Soto's intergrated model



Source: M. Leyton Soto, in M. Leyton Soto, & R. W. Tyler, 1969.

Beauchamp (1968) identified five critical decision-making areas as the constituents of a model for curriculum engineering. The five areas are: (1) the arena for curriculum development, (2) the selection and involvement of people, (3) the organization and procedures for curriculum planning, (4) curriculum implementation, and (5) curriculum evaluation (p. 18).

The arena referred to the scope of the development efforts. To Beauchamp the arena may range from a classroom to a nation-wide school system (as in the case of most Arab countries).

The second decision-making area, the selection and involvement of people, was intimately connected to the previous one because the selection of personnel to participate in the development process depended upon the scope of the development. If it were on a national level, then it would be unrealistic to select a teacher from a small school in a rural area to participate. One of the controversial issues related to this area was the question of whether teacher participation in the planning of curriculum was essential.

Theoretically, there was strong advocacy of full democratic participatory activity not only by the teacher but also of all lay personnel affected in curriculum development. However, Beauchamp cautioned against falling under the fallacy of impractical theory in his statement

> The theorist or practitioner who debates on this involvement should know beforehand the teacher-load problems that it carries in its wake. The conventional impression of the job of the teachers is that his sole responsibility is to develop instructional strategies and carry them out with his class or

> classes. To think of involving teachers additionally in anything as complicated as a curriculum system is impossible unless ways and means (are found) for teachers to participate unencumbered by teaching responsibilities. (In Razik, 1974, p. 1)

As for the other lay groups, such as parents and community members, Beauchamp believed that the question of their participation should be approached on at least three levels: (1) Should these groups be involved in curriculum planning? (2) If so, what role should they play? and (3) Is it possible to develop ways and means for that role to be effectively executed?

The third area concerning organization and procedures for curriculum planning defined the procedures to be followed by those who determined the overall curriculum by selecting and stating the goals and objectives and selecting and sequencing the learning activities. The logical approach was that problems in this area were more manageable in the case of a small scope and homogeneous working groups.

Beauchamp (1964) divided the organization and procedures area into five successive phases: (1) formation of a "curriculum council" to look after the overall coordination task, (2) appraisal of present practices, (3) study of new alternative contents, (4) formulation of criteria for decisions about what shall go into the curriculum, and (5) designing and writing the new curriculum.

It was his conclusion that these five phases incorporate most of the activities proposed by curriculum authorities and used in projects reported by school systems." (p. 131)

Beauchamp also emphasized the importance of the implementation phase. His assertion was that while many curricula had been well

planned, far fewer had been systematically implemented and, consequently, failed and ended gathering dust in a closet.

The fifth area of Beauchamp's model featured curriculum evaluation which he divided into four evaluation dimensions: the teacher's use of the curriculum, the curriculum design, student outcomes, and the curriculum engineering system.

One basic criticism that Beauchamp's model evoked is that it left many questions unanswered because it was a version of the top-down administrative model. Beauchamp did not deny the latter criticism as he himself noted that his model incorporated procedures that had become well established in school practice, and school practices have traditionally favored the administrative model.

Taba's Inverted Model

Taba (1962) expressed three major criticisms of the traditional, deductive sequence of curriculum engineering that commenced with general issues and moved forward to specific ones. Her criticisms centered about the following three points:

1. The deductive process "tended to reduce the possibility for a creative innovation because it limits the possibilities of experimentation from which new ideas and concepts of curriculum emerge."

2. Curriculum committees deduce what theoretically seems appropriate curriculum plans, but this judgment cannot be validated until implementation has taken place for a good length of time. This meant that the plans produced in this way were based on logic, not on empirical results.

3. Because these plans were deduced on logical bases, they tended to consist of very general, abstract prescriptions or "sketchy schemes" of instruction.

All these shortcomings of the traditional, deductive sequence of curriculum development according to Razik (1974) "create a wide gap at both ends between theory and practice" (p. 19-20). This conclusion is reinforced by Taba's statement that

> Theoretical designs of curricula are developed with meager foundations in experimentation while practice and implementation is carried on with insufficient understanding of theory. This gives theory an unreal quality and forces black and white thinking. (p. 20)

As proof for her criticism, Taba cited the failure of the core curriculum. To deal with these problems, Taba suggested an inductive sequence that began with the planning of specific teaching units by classroom teachers who implemented them and validated their applicability through testing. Then, these units may be used as an empirical basis for designing the overall curriculum. Taba determined that such sequence can help to bridge the gap between theory and practice because the production of teaching-learning units combine theoretical competence and practical experience in teaching. A second advantage claimed by Taba is that because these units were produced and implemented by teachers in the system, they can easily be introduced in the entire system without resistance. The third advantage of this method was that curricula made of both a general framework and tangible teaching-learning units were more likely to affect classroom practice than do the deductive sequences which stop short of the specific guidance afforded by the teaching units.

Taba's inductive (or inverted) model consisted of five steps or phases: production of pilot units, testing, the experimental units, revision and consolidation of the units, development of a framework,

and installation and dissemination of the new units. In addition, Taba presented an eight-step sequence as a guideline for teachers in producing new units. These eight steps were diagnosing needs, formulating specific objectives, selecting content, organizing content, selecting learning experiences (activities), organizing learning experiences (activities), evaluating, and checking for balance and sequence.

With regard to decision making, Taba's model may be considered to be a variant of the grass-roots model with more elaboration on the phases of curriculum development. Its major strength was inherent in its provision for the integration of theory and practice through the thinking-doing situation which this model advocated. Razik (1974) considered Taba's first two steps as important contributions to the implementation phase. He stated that

> Taba's model in purely organizational terms goes a long way towards stimulating reassessment of the conventional patterns in curriculum engineering, especially her concern for theory-practice interrelationships, the congruous translation of curriculum into translation and the differentiation of roles in the engineering process. (p. 26)

Human Factor Model

Many curriculum developers had agreed that a curriculum change was in fact a "people's change." However, on a practical basis, this concept was hardly emphasized in curriculum models. In the midst of the complications of reconciling the emphasis between the behavioristic approach of elaboration of objectives, processes, and phases and the managerial and decision-making hierarchy, the human factor, or "people's change," was usually lost. That is the reason why it does

not appear incongruous that Carl Rogers, a non-professional educator, suggested a model that centered its emphasis on the development of the human factor in curriculum development.

Rogers' Interpersonal Model

Rogers' model was predicated on the need of the society to meet the challenges of an ever-changing, contemporary world; and, in order to achieve that goal, the society should develop individuals who are open to change, who are flexible and adaptive and who have learned how to learn.

To educate people in this manner, there is a need for curriculum developed by professionals who have themselves become open, flexible, and process oriented; and to produce these professionals, the educational system should be characterized by "a climate conducive to personal growth" where innovation is not frightening and where the creative capacities of administrators, teachers, and students are nourished and expressed rather than stifled" (in Razik, 1974, p. 27).

The method developed by Rogers to promote personal growth was sensitivity training, or the T-group. Sensitivity training began with groups of peers; for instance, administrators, then teachers, then parents, and then students. Each peer group consisted of from ten to fifteen people who were willing to undergo this training. It was necessary for each group to have a trained facilitator to assist them in free expression in an unstructured environment to develop their interpersonal communication abilities and explore their feelings freely.

According to Rogers (1967), this experience produced significant interpersonal and intrapersonal benefits:

> Individuals come to know themselves and each other more fully than is possible in the usual social or working relationships, the climate of openness, risk taking and honesty guarantees trust, which enables the person to recognize and change self-defeating attitudes, test out and adopt more innovative and constructive behaviors, and subsequently to relate more adequately and effectively to others in his every day life situations. (Razik, 1974, p. 28)

After the T-group technique had been applied to all the peer groups, or vertical groups, Rogers moved to what he designated as the "horizontal group" to effectively accomplish successful curriculum change. A horizontal group, according to his definition, consisted of two board members, two administrative officers, two teachers, two excellent students, and two failing students, or "dropouts." These members were chosen from those who had been exposed to the sensitivity training in peer groups. The horizontal group through free expression without the existence of the status-role barrier "cannot only change the curriculum but the whole educational climate" (Razik, 1974, p. 32).

Although Rogers' curriculum development model lacked most of the technical components that curriculum specialists usually addressed (e.g., specifics of content, learning objectives, and implementation), "it represents an intriguing contribution to the literature of curriculum development" (Razik, 1974, p. 34).

Systematic Action Research Model

This model, developed in 1957 by Smith, Stanley, and Shores, was based on the assumption that "curriculum change is a social change,"

i.e., a "process that involves the personality of students, teachers, parents, the structure of the school system, and the patterns of personal and group relations among members of the school community" (p. 39).

Human relations, school and community organizations, and the authority of professional knowledge were the crucial elements of curriculum development emphasized by this model. This emphasis was the reason that the systematic action research model was considered as superior to Rogers' model which emphasized only one element, human relations. The action research model was also considered to be superior to those models that either emphasized organizational management only or those that emphasized professional knowledge only.

With regard to the human relations element, Smith et al. noted that curriculum existed in a context of an "extensive web of expectations" (Razik, 1974, p. 35). The community members all had an idea of what the school should do and what role the curriculum should play in it. Thus, an effective curriculum engineering process should include some mechanism for ensuring that the highly influential variables of individual and group perceptions were not omitted from consideration. This could be achieved without overemphasis through action-research.

The action-research procedure should be applied in solving problematic situations where a multitude of factors are involved. The first step would be a careful examination of the problem through (1) wide-ranging fact-finding activities to clarify the problem and (2) broad inquiry to identify the factors, forces, and conditions that bear

on the solution. This step helped individuals not only to understand the nature and scope of the problem but also to understand the data gathered to help in reassessing and modifying the entire plan.

Secondly, the action-research procedure facilitated the decision of what action to take in light of data gathered. From the brief description of the systematic action-research procedure, it may be identified as a scientific, unbiased inquiry that employed canons of logic with the chief aim of affecting immediate modification of the social practice under investigation. It differs from other types of scientific research in the fact that "it willingly sacrifices experimental control and precision in the interest of affecting immediate social change" (Razik, 1977, p. 39).

Smith, Stanley, and Shores (1957) explained how this procedure fits into curriculum development by proposing a four-phase model:

1. A diagnostic study of the school-community situation to ascertain the constellation of forces that maintains the present curriculum.

2. The induction of change in the existing curriculum so as to loosen up the established constellation of forces.

3. The control of various forces in order to move the level of curriculum practice in the desired direction and to the desired amount, and

4. The establishment of the new constellation of forces to sustain the new curriculum.

However, the authors cautioned against the over-simplicity of these phases as they appear to the reader and stated that they may not be linear or sequential and that many intermediate steps may be involved in each of them. They also noted that in scientific research there is a tendency to simplify the problem in order to develop some

perspective of meaning; otherwise, the problem would be overwhelmingly complicated to solve.

Razik (1974) in his analysis of this model stated that

> it leans heavily on trust in the capability of professionals and laymen to build and implement quality curricula through the process of action-research, and that from this respect it is a highly democratic approach, yet it is a far cry from the laissez-faire looseness of the grass-roots model. (p. 40)

Curriculum Development Model in Oman

From the description given in Chapter 1 of how curriculum development in Oman was conducted, it becomes quite evident that, although the curriculum designers did not propose a model, an analysis of the sequence of processes and decision-making facilitates the identification of curriculum models. From a decision-making point, the Omani's have relied completely on the administrative model.

The top level educational authority made the decision that a curriculum development project was needed and appointed a high consultation committee to do the job. Next, the high consultation committee appointed sub-committees for the subject matter area to design the individual curricula and prepare the educational materials under the coordination and supervision of the high consultation committee. After these processes were completed, the curriculum was introduced to implementors to give direction on the methods of implementation.

The participation of teachers, supervisors, and school administrators in decision making was non-existent during the planning phase and the material production phase. From a human-factors point of

view, those personnel most directly affected by curriculum change, namely teachers, students, parents, supervisors, and school administrators, were included only in a minor way in designing the changes and in deciding the strategies and techniques of implementing the Omani curriculum. This may have generated resistance to the change process by those most affected by it, at least in the form of passiveness and lack of enthusiasm. Moreover, the implementors would lack the real understanding of the actual dimensions of change and what would be expected from it. This may lead less than maximum implementation and accomplishment of the goals of the change process.

From the point of view of the nature and sequence of processes in the curriculum development project in Oman, it was clear that many essential components, especially the evaluation process, were omitted. Neither formative evaluation of the various phases of the planning process nor summative evaluation of the entire project and its products was completed, or even included, by the designers. No evaluation of the goals and objectives for each level of schooling and each subject matter area was established. No pilot of the proposed materials had been undertaken. This meant that the quality control component was completely missing in all phases of designing the Omani curriculum.

B. CURRICULUM EVALUATION

The term evaluation has been traditionally associated with tests, marks, grades, and teacher ratings. This limited approach to evaluation highlights only the products or the outputs of the educational process. Goodlad (1978) indicates that evaluation

concentrates on the outputs of the educational process rather than the variables of the process. Inevitably, evaluation became synonymous with assessment. However, evaluation should be perceived as an integral part of any curriculum development and distinct from the assessment of individual learners. Curriculum evaluation demands that curriculum developers and other educationalists account for their decisions concerning the theory, content, and methods of their practices. The salient feature in curriculum evaluation is that the data are gathered as a basis for decision-making about the curriculum and/or resultant and concomitant administrative changes. Curriculum evaluation provides evidence of effectiveness.

An underlying principle of curriculum development is that often there exists a gap between the plans of the curriculum developers and the practices of those educationalists, i.e., teachers, supervisors, and school administrators, who are supposedly implementing the curriculum project. Curriculum development is a highly complex entity with intricate intermeshing of theoretical and practical elements. If curriculum is a dynamic and continuously evolving entity, it requires evaluation formulated as continuous action-research and feedback. Therefore, curriculum evaluation promotes continuous adaptation to methodological, social, economic, and technological changes.

There is a new approach to evaluation, in an era characterized by important changes of the nature, scope, and purpose of evaluation. The innovations evolved from the refinement of educational theory as a result of systems evaluation and a better understanding of the teaching-learning process. Some aspects of this new perspective

require further delineation.

The holistic concept of evaluation is gradually, although slowly, permeating the educational system, including the field of curriculum development. To judge the effectiveness of a curriculum development project, it is necessary to examine the entire structure and interactions of the educational system, or a level of education, both vertically and horizontally.

No longer is it considered meaningful to evaluate one subject matter in one grade level. Subject matter areas should be evaluated across all levels plus the human and material resources designated for their implementation.

Evaluation is more inclusive than measurement which is one basic element of evaluation. Measurement provides the data with which to make decisions. The vital concerns of evaluation are the adequacy, reliability, validity, and efficiency of the objectives, procedures, or results of the educational process.

The process of evaluation should be purposeful. It focuses attention on making decisions of meaningful change in learners. Consequently, evaluation must be designed in terms of goals and objectives to accomplish its designated function. Burr et al. (1964) recommended five elements to improve evaluation programs.

The initial step is an assessment of the present program of evaluation utilized by the school system or development project committee. Then, the staff and administration of a curriculum development project should formulate a philosophy of evaluation. The purpose of evaluation should be formulated, agreed upon, and

documented. From the documentation of the purpose of evaluation, a series of generalizations about evaluation should be generated and put into writing. Finally, the evaluation program should be continuously implemented and revised.

The concept of continuity imbedded within the evaluation process emphasizes the on-going nature of evaluation. Historically, evaluation of the curriculum centered on reaching conclusions about learners' performance. The conclusions focused on whether a student passes a course or failed it, met graduation requirements or not, had gained the minimum knowledge in an area of knowledge or not. In the new approach, the evaluation is concerned with not only the outcomes but also the diverse variables involved in the learners' achievements and progress.

To assess the influence of these diverse variables, the following questions assist in addressing the evaluation of learners' achievements and progress:

1. How clearly are the philosophy and goals of the curriculum defined? Do all teachers know, understand, and accept them?

2. Have teacher-made and standardized tests been carefully selected? When was the testing program last revised?

3. In terms of their abilities, socio-economic, and cultural backgrounds and other limiting factors, how are the learners achieving? Do the teachers and administrators recognize each learner and his profile, not merely the median test scores of a group?

4. Are the limitations of all tests recognized by the school staff?

5. Are the national medians considered in their proper perspective in interpreting the performance of learners in various localities?

6. Do teachers, supervisors, and administrators have many opportunities to discuss a learner's progress from one

group to another and from one grade level to the next?

7. Is the teacher's professional judgment given adequate weight in the measurement of a learner's progress?

Similarly, evaluation of a curriculum development project should not be limited to judgment of only the products or outputs of the educational process. The investigation must interface various components of the process of curriculum development. These components may be grouped in the following categories: (1) goals, objectives, and purposes; (2) organization and personnel; (3) instructional strategies and practices; (4) resource agents, persons, and materials; and (5) evaluation strategies and practices.

Formative and Summative Evaluation

Another manner in which to view curriculum evaluation is in the context of the purpose and use of the information. With the introduction of the concept of formative versus summative evaluation by Scriven (1967, pp. 30-40), there was a shift from the end products to an integral part of the complex process of curriculum development. Bloom et al. (1971) recognized this distinction and used it extensively. Formative evaluation provides empirical data to assist in rational, decision making to absorb corrective action during the planning and designing phases of curriculum development; whereas, summative evaluation provides empirical data of the overall curriculum development project after it is in operation.

According to Morocco (1979), formative evaluation should be utilized during the process of curriculum development at three stages: (a) the planning and designing, (b) implementation of the curriculum

limited schools, and (c) dissemination of it to all other users in the educational system. At the planning and designing stage, formative evaluation assists the developers in "gathering information about alternative approaches and choices to achieve their goals" (1979, p. 137-8). It can provide information derived from a trial use of new plans, "including views and attitudes of those trying out the plan" (Mcrococo, 1979, p. 140). At the implementation stage, formative evaluation can "identify and conceptualize curriculum factors or processes that are influencing the ultimate success of the program" (p. 142). At the dissemination stage, it can provide data regarding the actual use of the curriculum for new populations which in turn provide a basis for previous modifications of such curriculum. Thus, the most characteristic value of formative evaluation lies in the fact that it emphasizes the utilization of the evaluative process and quality control measures as interactive processes in curriculum development.

Summative evaluation, in contrast, concerns itself not with the step-by-step process, but with the final outcome and the formal model of the curriculum development project. In a way, summative evaluation is assessment of the merit of a curriculum. the value of summative evaluation cannot be denied in contributing significant data for decision making with respect to revising curriculum plans, formulating new ones, adding or dropping courses of instruction, selecting new content, revising goals and objectives, and the like. In summary, the difference between formative and summative evaluation lies in the purpose for which the evaluation will be used and the timing of the evaluation rather than in the methodology or analytical techniques used

in the evaluation.

The emergence of the concepts of quality control in the development process and accountability of the costly investment of human and economic resources in educating learners fostered the expansion of the role of formative evaluation. Models were developed to chart the various processes involved in evaluation.

MODELS OF CURRICULUM EVALUATION

Although many evaluation models evolved, the most applicable to formative evaluation of curriculum development are the behavioral objective, decision-making, Provus discrepancy evaluation, accreditation, and responsive models.

Behavioral Objective Model

The work of Tyler in the 1930's, in conjunction with his evaluation of the Progressive Education Association's Eight-Year Study Program in the USA, represented the first shift in the process of educational evaluation. Because Tyler defined education as a behavioral change in learners, his evaluation consisted of measuring the extent to which such change had taken place. Tyler's model (1949, p. 305) is probably the best known and most extensively used model of educational evaluation. He distinguished three foci of educational evaluation: objectives, learning experiences, and examination of achievements. Not only did Tyler place greater emphasis on the importance of evaluating the accomplishment of the objectives but he also stressed the merit of evaluating the two other components.

The behavioral objective evaluation model was predicated on the scientific management movement of the work of Bobbitt and Charters. This model has been championed by advocates of teacher accountability because of its emphasis on the evaluation of learners' outcomes. Moreover, the interest in this model intensified as a result of the campaign headed by Mager (1962) and Popham (1969) for the use of behavioral objectives. The model retains its dominance because educational authorities, especially in the United States, require requests for federal funding to include a statement of objectives to be achieved along with procedures and instruments to measure their achievement as a method of evaluating the effectiveness of a project. Because of its objective measurement of prespecified goals that fit neatly into the dominant, traditional, bureaucratic management style, the behavioral objective model has received widespread use in schools. It is especially suited to summative evaluation or product evaluation. According to Tyler (1950) "evaluation is the process for determining the degree to which changes in behavior of students are actually taking place" (p. 69).

Decision-Making Model

One disadvantage of Tyler's behavioral objective model is the lack of a component for formative evaluation which is essential in the process of curriculum development. To remedy this deficiency, a USA national Phi Delta Committee chaired by Stufflebeam developed a novel approach that incorporated formative evaluation. Stufflebeam (1971) defined evaluation as "the process of delineating, obtaining and providing useful information for judging decision alternatives" (p.

43). This definition is in harmony with Cronbach (1963) who indicated that "Evaluation is the collection and use of information to make decisions about an educational program" (p. 672). According to Saylor and Alexander (1981), the decision-making model provides data regarding four stages of the development process.

a. Context evaluation which contributes to the definition of the objectives;

b. Input evaluation which is necessary for decision making on matters of design;

c. Process evaluation which guides decision making on operations; and

d. Product evaluation which provides data for judging attainments, and hence for revision, termination or continuation. (p. 302)

The gathering of evaluation regarding these four steps, context, input, process, and product, led to the acronym CIPP for this model. For each of the above four stages, the following steps were taken in the process of evaluation: (1) determining what is to be evaluated and for what decision-making purposes, (2) the data needed, (3) collecting the data, (4) defining the criteria to determine the quality standards, (5) analyzing the data in terms of the specified criteria, and (6) formatting the information for decision making. It is important to note that the CIPP model does not include the decision-making state. The model provides only for collection and presentation of the data and a variety of alternatives available to the decision-makers. This point was emphasized by Stufflebeam (1971)

> The entire purpose of evaluation is to service the decision-making act--to identify the decision question that calls forth an answer to identify alternative answers (decision alternatives) that might be given in response, to identify and refine the criteria (values) to be used in choosing among

> available decision alternatives; to identify, collect, and report information, differentiating the decision alternative and finally, to determine whether the chosen alternative did meet expectations for it. (p. 43)

The decision-making evaluation model assumes that a consensus could be reached on the general goals for each stage of the curriculum development and on the criteria to be applied in assessing the achievement of the goals. The difference between the agreed-upon goals and the reality serves as basis for program objectives.

Provus Discrepancy Evaluation Model

The Provus model developed for the Pittsburgh Public School System in the U.S. is a version of Stufflebeam's decision-making model. Provus (1971) defined program evaluation as

> the process of defining program standards, determining whether a discrepancy exists between some aspect of program performance and the standard governing that aspect of the program, and using discrepancy information either to change performance or to change program standards. (p. 183)

In his model, Provus identified four basic developmental stages associated with four steps in each of the three content categories that are essential components for the evaluation of an on-going program. In addition, he identified an optional fifth stage entitled program comparison and cost-benefit analysis.

Figure 5 shows the five stages and the associated five steps in the three content areas while Figure 6 depicts the flow chart of the Provus model.

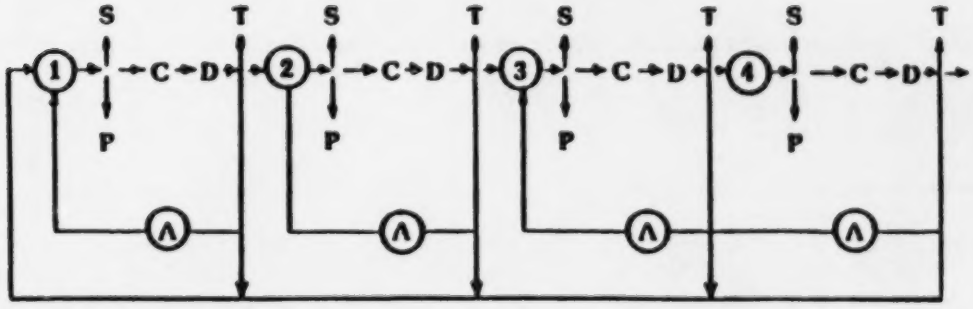
The Provus model necessitates the evaluation of the goals and objectives, a feature that is lacking in other versions of the decision-making model. This necessity arises as a result of the

FIGURE 5 The five stages of the provus model and the steps of evaluation associated with them

Stage	Content		
	Input	Process	Output
Design	Design adequacy		
Installation	Installation fidelity		
Process	Process adjustment		
Product	Product assessment		
Program comparision	Cost-benefit analysis		

Source: Alexander & Saylor, 1981.

FIGURE 6 Flow chart for provus discrepancy model



Key to symbols:

S - Standard

P - Program performance

C - Comparision

D - Discrepancy information

A - To change program performance or standards

T - To terminate program

Source: Alexander & Saylor, 1981.

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presence of discrepancy, a case in which the planner should either revise the program standards and modify the program or terminate it. The evaluation moves from one stage to the next in an effort to identify discrepancy until the whole program is modified to fit better or be completely discarded. In the situation where the four essential steps lead to the validation of the program as a result of modification or best fit, the fifth step may be executed to judge the cost benefit of the program in order to install it or economize the cost.

Both Stufflebeam's and Provus' versions of the decision-making model have been applied in practical situations and have proven to be valuable in curriculum evaluation.

Accreditation Model

This model's inception may be traced to 1871 when the University of Michigan invited high schools to seek university approval of their academic programs to permit exemption of their students from the university's entrance examination. Voluntary regional accrediting associations for high schools were organized in the latter part of the 19th century. This power was given solely to the education departments of the various states. In this model, standards were set on the basis of membership, a practice that represented an appraisal system. Under the aegis of the education departments in the states, the schools were legally bound to meet set standards or suffer penalties, such as loss of state financial support or, at the worst face de-establishment.

The same system is now applied to universities and other institutions of higher education. Accreditation of professional

schools, according to Saylor and Alexander (1981), "has been a particularly powerful influence on excellency in higher education" (p. 327). The basic idea of accreditation is the utilization of professional experience in monitoring and improving educational programs on all levels. However, House (cited in Saylor and Alexander, 1981, p. 327) views accreditation in its beginning as a voluntary system to prevent government influence; a fact that does not apply now under the state accreditation systems.

The accreditation model applies a discrepancy evaluation model; and, in a way, is a version of the decision-making model. The standards prepared by any accreditation association generally cover Stufflebeam's four areas: context, input, process, and product. However, the terminology used is different. Saylor and Alexander (1981) stated that

> standards typically include items associated with context to such as statements of philosophy and goals, assessment of community needs, and descriptions of students to be served and standards regarding inputs include qualification of staff, physical facilities, library resources, instructional resource and curriculum plan. (p. 328)

Two approaches are used in determining discrepancies between the prespecified standards and the reality. Self-evaluation is performed by a committee of staff members, community members, parents, and students who prepare a report showing to what extent the real situation in the institution meets the standards of the accrediting association. The report also includes remedial recommendations. In addition, a report of the situation is prepared by a visiting committee of professionals assigned by the accreditation association. A variety of data is made available to them to compare with the prespecified

standards. Institutions are given a period of time for remediation of any severe discrepancies and improvement of practices to meet the prespecified standards.

A major criticism of the accreditation model is that it reflects the best of the past and present while restricting future development by its prespecified standards. This practice may contribute to making institutions obsolete in a rapidly changing world. On the other hand, there is the danger of adopting new standards without sufficient evidence of their appropriateness. Glass (1969) criticized the accreditation model in his argument that

> Evaluation will not enhance the value of an educational program if it demands conformity to standards which themselves cannot be demonstrated to lead to valued goals. The genetic flaw in the accreditation model will probably never be corrected, thus it will not grow into the fully useful methodology of evaluation that is needed. (p. 27)

Responsive Model

In Hamilton et al. (1977) Stakes, the originator of the responsive evaluation model, defined evaluation to be responsive

> if it orients more directly to program activities than to program intents, if it responds to audience requirements for information, and if the different value-perspectives present are referred to in reporting the success and failure of the program. (p. 163)

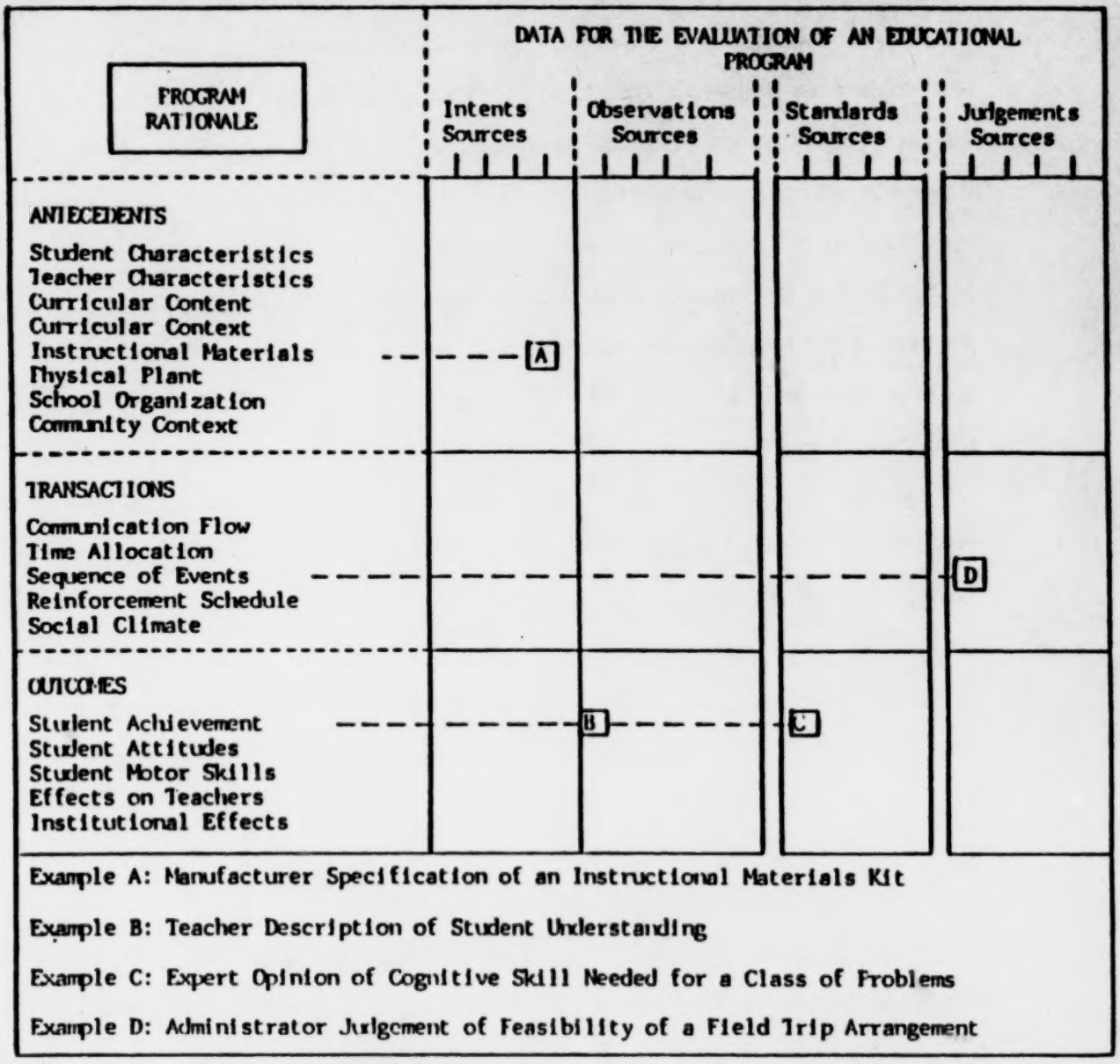
To facilitate communication with the audience, an evaluator using the responsive model, raises issues with students, parents, teachers, and administrators, rather than generating objectives or hypotheses. These issues are identified by the evaluator during free interactions with these concerned groups.

A responsive evaluator assigns a group of observers to monitor the program in question and write brief narratives to display the information. He presents the collected information in display form to determine what is of value to his audience. The function of the responsive evaluator is not to offer criticism or endorsement, but to process judgments rather than to render them. According to Stake, "He (the evaluator) gets program personnel to react to the accuracy of his portrayals. He gets authority figures to react to the importance of various findings" (p. 143). Hamilton et al. (1977) explains that Stake's view negates the evaluator as uniquely qualified to render judgments, criticism, or endorsement.

Figure 7 depicts the specific model proposed by Stake to be used for information collection. The rows in the first column list categories of information or other data that the evaluator must collect. These are antecedents, "any conditions existing prior to instruction and learning"; transactions, "the countless encounters of students with teachers, student with student, i.e., the succession of encounters that comprise the process of education"; and outcomes, "abilities, achievements, attitudes and aspirations of students resulting from an educational experience" (Stake, 1969, p. 20).

Data are entered in each of the twelve cells for whatever items may be appropriate to consider in the three categories: antecedents, transactions, and outcomes of Figure 7. Stake distinguishes between "intents" which are the intended student outcomes and goals and objectives versus "observations" which are the descriptive data of the real situation, direct observations, test results, biographical data

FIGURE 7 Elements of congruence-contingency model for educational evaluation



Source: R. E. Stake, in W. H. Beatty (ed.), 1969.

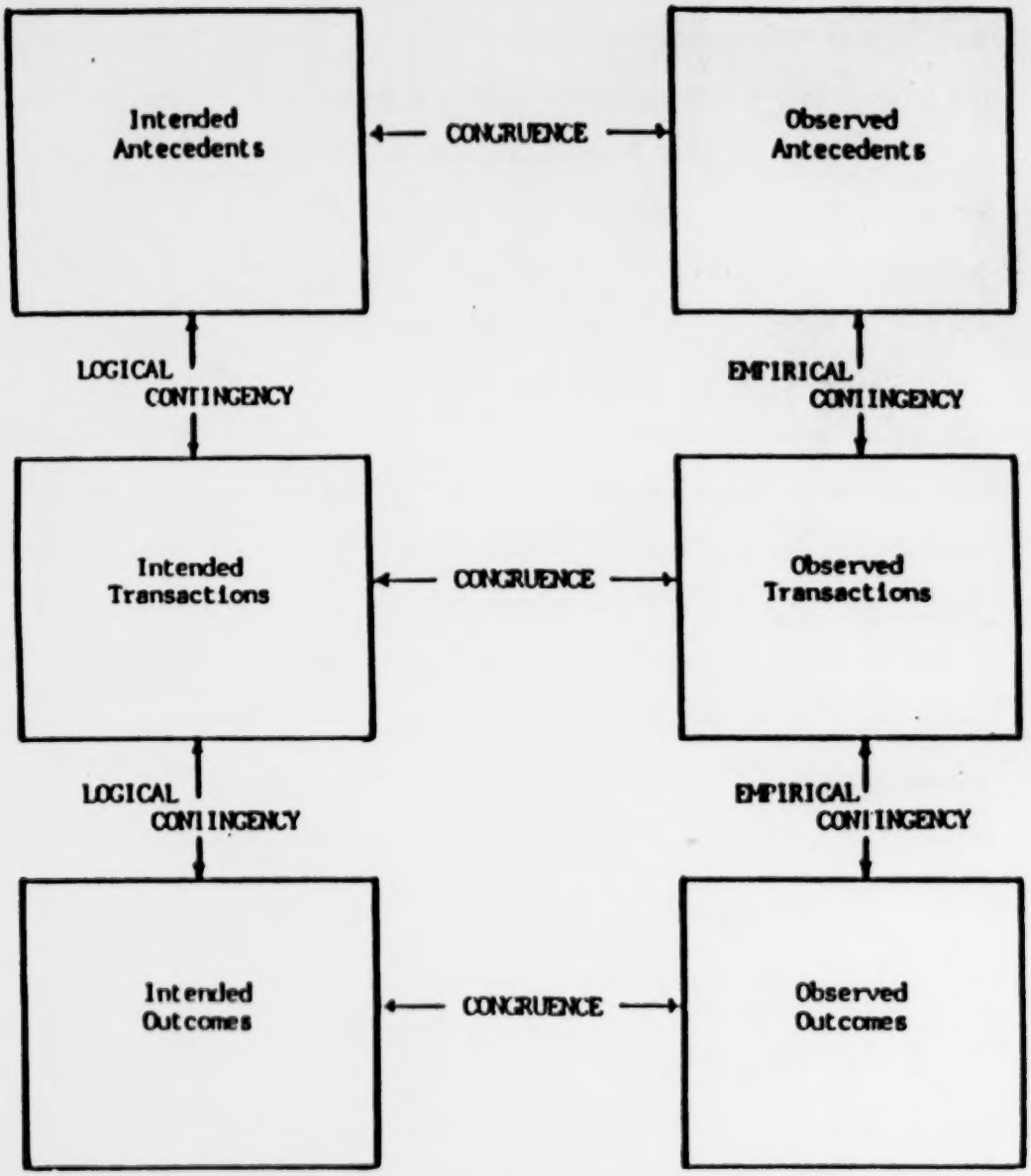
sheets, interviews, check lists, opinionnaires, follow-up reports, and charts. Standards are the stated achievement criteria that should happen in the educational situation as set by the audience. Therefore, standards should vary from school to school, instructor to instructor, and student to student. The crucial element of the evaluation process is the specification of these standards and the identification of the ownership of these standards.

Figure 8 depicts Stake's congruence-contingency model which contrasts the descriptive data with the intentions. Congruence would be an identical match between the intended and the observed. Stake also insists that evaluation should not stop at examining congruence but that the curriculum plan should be judged by examination of the antecedents and the transactions. According to Saylor and Alexander (1981), in Stake's model "congruence indicates only the degree of match, not the validity or value of the outcomes" (p. 332)

While congruency analysis assisted in identifying the areas of weakness in a program, contingency analysis represents an effort to determine the why's of the outcomes, the particular set of antecedents, conditions, and transactions that produce particular outcomes. It is this type of data that is needed to arrive at curriculum and instruction decisions.

Stake's model promotes a variety of data and results. Those results related to evaluation of objectives or decision making are forwarded to the management, or educational authorities; whereas, those results related to responsive evaluation are forwarded to concerned community groups. As cited in Saylor and Alexander (1981, p. 332),

FIGURE 8 Analysis framework for congruence-contingency model for educational evaluation



Source: R. E. Stake, in W. H. Beatty (ed.), 1969.

House viewed Stake's model as a "democratic pluralism model." This presumes a free market of ideas from which consumers will most likely select the best; a feature that makes Stake's responsive model a useful tool in educational reform.

From the variety of curriculum evaluation models presented above, it is obvious that the determinant selection factor is the purpose of the evaluation. Tyler's model most efficiently measures the achievement of curriculum objectives. The accreditation model best serves those institutions whose purpose is to qualify for accreditation. Stufflebeam's decision-making model generates formative evaluation data.

In the case of comprehensive curriculum evaluation, it is best to develop a coherent multifaceted plan. Saylor, Alexander and Lewis (1981) propose a plan that includes both formative and summative types of evaluation and Stake's concepts of "preordinate" and "responsive" evaluation. Each aspect of evaluation is interrelated with the other aspects in the sense that the data and information drawn from a particular segment can contribute to the evaluation of the other segments and consequently to the overall evaluation of the program.

Curriculum Evaluation in Oman

It is apparent that the designers of the curriculum did not use any of the models strictly as they have been presented above. However, one can predict that the Administrative (line-staff) Model was considered in developing the new Omani curriculum with less emphasis on the Grass Roots Model. In addition, the Tyler Curricular Rational

(Figure 3) contributed to developing the general objectives i.e., philosophy of Omani educational system, psychology of learning, selection of learning experiences, organization of learning experiences, and directions of learning experiences, with the omission of evaluation of learning experiences during the process of curriculum development. In contrast, the integration of objectives, activities, experiences and evaluation in the practice of curriculum development as featured in the Leyton Soto integrated model, Figure 4, is the ideal process of curriculum development.

Only informal evaluation was operational in the development of the Omani curriculum. When evaluation occurred, it was after the implementation of the new materials, more specifically the textbook follow-up by the Curriculum Department of the Ministry of Education and Youth. Each year the Curriculum Department collected the teachers' and supervisors' opinions relating to the presence of errors, difficult topics, inaccurate figures, and other problematic items so that revisions and corrections could be made prior to the printing of textbooks for the new school year.

In reviewing the curriculum models of evaluation, as featured in this chapter, this research project did not adopt any particular model because it did not match the unique development of the Omani curriculum. However, many elements from the various individual models were incorporated either implicitly or explicitly in designing the various operations of the evaluation of the Omani curriculum to accommodate its uniqueness. For example, the five stages of the Provus model and the steps of evaluation associated with them were considered

with the exception of program comparison and cost-benefits analysis. In addition, R. E. Stake's congruence-contingency model provided this study with the rationale for the selection of some of the variables, i.e., teacher characteristics, curriculum content, curriculum context, instructional materials, physical plant, communication flow, time allocation, sequence of events, and social climate. These variables (with adaptation to suit the Omani educational system) are reflected in the composition of many of the items included in the questionnaire.

Chapter 4

METHODOLOGY AND RESEARCH DESIGN

This chapter presents a description of the methodology including the population and sample selection, development of the instrument, the pilot study, procedures for administering the questionnaire, and statistical procedures. The intent of this project was to evaluate the Omani curriculum at the three educational levels: primary, preparatory, and secondary. This volume will concentrate on the evaluation of the Omani Secondary School Curriculum.

The basic design of this project used the standard technique of survey research, i.e., administration of a structured research questionnaire to a sample of teachers, supervisors, and administrators of the Omani Secondary Schools. In addition, a questionnaire was administered to a sample of parents of students enrolled in the secondary schools.

Furthermore, a version of the questionnaire was administered to a sample of secondary school students in both the arts and science sections and to a sample of the secondary school graduates of 1987. The latter sample included graduates who pursued higher education by attending Sultan Qaboos University, Intermediate Teacher Colleges or Omani Technical College and those graduates who entered the workforce.

POPULATION AND SAMPLE SELECTION

Nine administrative school districts make up the Omani educational system. These are Muscat, Batinah, Roustaq, Dakhilyah, Sharqiyah,

Wousta, Dhahirah, Janoubiyah, and Musandam. A proportional sample was selected from each district so that it would be equally representative of the total population. The sample was further stratified on the basis of gender (male - female), nationality (Omani - Non-Omani), and subject matter area.

During the 1987-88 academic year, the number of teachers in the Omani educational system at the secondary level was 1,131. This total included 16 male and 19 female Omani teachers and 615 male and 481 female Non-Omani teachers. From this total, those newly appointed (i.e., those with less than one year's teaching service in the Omani educational system) were eliminated. The reason for this was that the newly appointed teachers were not familiar with the Omani curriculum. The criterion for inclusion was at least one year's experience of implementing the Omani curriculum. In addition, teachers of art, physical education, home economics, commerce, agriculture, and industrial specializations were eliminated because the curriculum for these special subject areas had not evolved under the auspices of the High Committee of Omani Curriculum Development. This removed 98 teachers from the 1,131 total figure. Also excluded were the 190 teachers who had participated in the pilot study. Thus, 288 teachers were not included in this study, and the total population to be sampled was 843 teachers. This represented 74.5 percent of the teacher population in the secondary schools in Oman.

Table 1 presents the selected sample of 843 secondary teachers categorized by subject matter, nationality (Omani - Non-Omani), and gender (male - female).

Table 1: Sample of secondary teachers in Oman by subject matter, nationality, and gender.

	Omani	Non-Omani	Total	Male	Female	Total
Islamic Education	18	70	88	47	41	88
Arabic Language	17	100	117	67	50	117
English Language	12	105	117	64	53	117
Mathematics	6	106	112	71	41	112
General Science	2	29	31	19	12	31
History	4	61	65	43	22	65
Geography	9	65	74	44	30	74
Civic Education	4	36	40	24	16	40
Chemistry	4	51	55	32	23	55
Physics	1	56	57	40	17	57
Biology	4	50	54	31	23	54
Human Culture	3	30	33	24	9	33
Total	84	759	843	506	337	843

Table 2 presents the selected sample of 843 secondary teachers categorized by subject matter and school district.

There were 99 supervisors in the Omani educational system at the secondary level. All 99 supervisors were provided with the questionnaire. Table 3 shows the population and sample of secondary supervisors categorized by subject matter, nationality (Omani - Non-Omani), and gender (male - female).

Table 2: Sample of secondary teachers in Oman by subject matter and school district.

	Musc	Bat	Rous	Dak	Shar	Wous	Dhah	Jan	Mus
Islamic Education	15	15	10	10	8	6	10	10	4
Arabic Language	14	15	15	15	12	9	15	15	7
English Language	14	15	15	15	14	8	15	14	7
Mathematics	15	15	15	13	12	11	14	13	4
General Science	3	3	5	5	2	3	5	4	1
History	12	12	8	9	5	4	6	7	2
Geography	12	12	9	12	4	5	7	8	5
Civic Education	7	5	3	4	4	5	4	5	3
Chemistry	10	10	7	6	6	5	4	6	1
Physics	10	10	7	8	4	4	6	7	1
Biology	9	10	5	9	4	3	7	6	1
Human Culture	4	5	5	5	3	2	4	4	1
Total	125	127	104	111	78	65	97	99	37

Table 3: Sample of secondary supervisors in Oman by subject matter, nationality, and gender.

	Omani	Non-Omani	Total	Male	Female	Total
Islamic Education	2	10	12	12	-	12
Arabic Language	1	15	16	15	1	16
English Language	2	17	19	16	3	19
Mathematics	-	9	9	8	1	9
General Science	-	6	6	6	-	6
History	1	7	8	8	-	8
Geography	-	7	7	7	-	7
Civic Education	2	4	6	4	2	6
Chemistry	-	6	6	5	1	6
Physics	-	3	3	3	-	3
Biology	-	4	4	4	-	4
Human Culture	1	2	3	2	1	3
Total	9	90	99	90	9	99

The number of administrators in the Omani educational system at the secondary level is 230. From the total of 230 administrators at the secondary school level, a total of 75, or 32.6 percent, participated in this study. Table 4 presents this sample of 75 secondary school administrators categorized by nationality (Omani-Non-Omani) and gender (male - female).

Table 4: Sample of secondary administrators in Oman by nationality, and gender.

Omani	Non-Omani	Total	Male	Female	Total
32	43	75	45	30	75

Table 5 represents the sample of administrators by school district.

Table 5: Sample of secondary administrators in Oman by school district.

Musc	Bat	Rous	Dak	Shar	Wous	Dhah	Jan	Mus	Total
9	9	8	10	9	9	9	6	6	75

A proportional sample of parents was selected from the nine school districts. Criteria for selection were the ability to read and write plus some participation in school district activities. Therefore, 100 parents were provided with the questionnaire.

A total of 531 students from all grades of the secondary school, made up of 270 students from the arts section and 261 students from the science section responded to a questionnaire to evaluate the curriculum objectives, methods of instruction and evaluation, and physical facilities. Another group of 254 secondary school students from grade 3, comprised of 130 students from the arts section and 124 students from the science section, was selected to evaluate the content of textbooks of the various subject matters by completing questionnaires

designed for this purpose.

A questionnaire focusing on the curriculum objectives, the various subject matters, content of the textbooks, method of instruction and evaluation, and physical facilities was administered to 110 secondary school graduates of 1987. This group included those graduates who continued to higher education by attending Sultan Qaboos University, Intermediate Teacher Colleges, or Omani Technical College and those graduates who entered the workforce.

DESIGN OF THE INSTRUMENT

The instrument used in this research was a questionnaire designed to measure the degree of accordance between the intentions of the curriculum designers and the perceptions of these intentions by the implementors: the teachers, supervisors, and administrators and also by the client population, students, graduates and parents. The intentions of the designers were formally recorded in the form of general aims of the curriculum for the secondary schools, specific objectives for the various subject matter areas, and recommendations for implementation that covered methods of instruction, educational materials, and evaluation techniques. Therefore, it was necessary to base the items of the questionnaire on these intentions.

The statements of philosophy, objectives, and recommendations were analyzed to identify the major ideas and concepts expressed in them. Then, items were designed based on these ideas and concepts. The pool of items designed in this manner was then categorized under several parts and sections each of which concentrates on one aspect of the

theory or the implementation process.

As an example, the General Goal II (Farhan et al. 1985) is "To help the learner develop his mental abilities and skills through learning by action." The major idea of this goal is learning by action. This idea should be present in both the curriculum design and the method of instruction, especially in subject areas where learning by action is easy to accomplish, such as in science. The same idea also appeared in the recommendations in relation to procuring the facilities and resources needed to facilitate learning by action. Recommendation 7 (Farhan et al., 1985) stated that "All the classes in the schools of Oman should be provided with the teaching aids, materials, and laboratory equipment needed for the science curriculum." The items constructed to measure the extent to which this idea was exhibited in the curriculum are

1. To what degree are practical and field activities included as a part of the Omani curriculum?

2. To what degree are practical and field activities included as a part of the method of teaching?

3. Rate the rooms where you teach your courses relative to the following characteristics:
   a. proper ventilation
   b. electrical outlets where needed
   c. room darkening capability
   d. adequate facilities for large and small group instruction and independent study
   e. adequate space for storing equipment and materials
   f. adequate space for student project work

4. To what degree are suitable types of basic audio-visual equipment and instructional aids provided and readily available to
   a. teachers for instructional purposes
   b. students for project work
   c. students for team work
   d. students for individual work, both during and outside of classroom time?

5. To what extent are the materials, equipment, and services in the classroom kept in good working order?

6. To what degree are the activities suggested in the textbook practicable?

Although these items are related to one idea, they were placed in the sections of the questionnaire where each item would be most relevant. For example, Item 2 was placed in the section "Methods of Instruction." Items 3, 4, and 5 were placed in the section "Facilities, Materials, and Resources." Item 6 was placed in the section, "Textbooks."

Each major idea, or concept, that was included in the designers' intentions was treated in the same manner. This resulted in a pool of items which was then revised in order to make the items as clear, precise, concise, and understandable as possible. Similar questionnaires published in the U.S.A. were studied, and some items of relevance were adapted for use in the present questionnaire (Herman et al., 1969; Kerlinger & Pedhagur, 1967; Steele, 1969; Breiter, 1976 & 1977). The questionnaire in its final form was divided into two parts each comprised of various sections. It should be noted that the questionnaire was designed to be the same for teachers, supervisors, and administrators with only title changes for each group. Part I of the questionnaire consisted of three sections. Section A: General and Demographic Information consisted of items of the demographics of implementors, i.e., teachers, supervisors, and administrators. The two other sections were grouped under the category THEORY which included Section B: Educational Theory and Section C: Omani Educational Objectives.

Part II of the questionnaire consisted of eight sections which related to the various aspects of implementation. These eight sections were grouped under three categories. The first category was CURRICULUM which included Section A1: Process of Curriculum Development and Section A2: Curriculum Content of the various subject matter contents (Islamic Education; Arabic Language; English Language; Mathematics; Specialized Subject Matters in the Arts Section [General Science, History, Geography and Contemporary Problems, Civic Education]; Specialized Subject Matters in the Science Section [Chemistry, Physics, Biology, Human Culture] studied in this research project. The second category was PROCESS AND PRACTICE which included two sections, Section B1: Classroom Activities (Method of Instruction) and Section B2: Student Assessment. The third category was RESOURCES which included five sections. Section C1: Human Resources (Staff) and section C2: Physical Resources (Equipment, Facilities, and Materials) and Section D: Textbooks; and Section E: Teacher's Manuals.

Each of these sections will be discussed below to explicate the major ideas and concepts that the questionnaire was designed to assess. For a complete version of the questionnaire see Appendix A in Volume II.

Part I Section A: General and Demographic Information

The items in this section were designed to provide the researcher with information about the implementor's gender, nationality (Omani or Non-Omani), teaching, supervisory, or administrative qualifications (both preservice and inservice), years of exposure to the Omani

curriculum, and years of teaching experience in Oman as well as in countries other than Oman. This section contained several items, most of which could be weighed on a five-point scale. Some of the items, because of their nature, were assessed on a two-point scale, such as the item about gender (male/female).

Part I Section B: Educational Theory (Teacher, Supervisor, Administrator)

This section consisted of 19 items which are bi-polar in nature. These items were designed to locate the teachers on either pole with regard to their attitudes toward a variety of educational issues, such as authoritative versus democratic management in the class, innovative versus traditional, pro-student centered instruction versus pro-teacher centered instruction, and subject matter education versus holistic development of learners' personality. The 19 items were grouped under the following five trends associated with the curriculum designer and implementor.

1. The role of curriculum content and practice in developing the various components of the student's personality (holistic versus single component): Items 1, 2, 3, 4, and 7.

2. The type of management policy in the classroom (democratic versus authoritarian); the degree of freedom for the teacher in choosing his/her own approaches: Items 5, 10, and 16.

3. The emphasis on a curriculum centered around the student: Items 6, 8, 9, 12, and 13.

4. Relating the curriculum to everyday life and the students' social and cultural heritage: Items 11, 14, 15, and 17.

5. Development of thinking abilities: Items 18 and 19.

Part I Section C: Omani Educational Objectives

This section was designed to obtain the implementor's judgment on the degree to which the philosophical goals and learning objectives of the Omani curriculum were accomplished. This section is composed of 31 items that could be categorized under eight categories:

1. Development of learning outcomes: Items 20, 26, 27, 28, 29, 30, and 31.
2. Application of acquired knowledge: Items 23, 24, and 25.
3. Development of awareness and positive attitudes toward scientific inquiry and process: Items 9, 17, 19, 21, and 22.
4. Development of thinking skills: Items 10, 11, 12, and 13.
5. Development of social awareness and views: Items 4 and 7.
6. Continuing, or life-long, education: Items 5 and 8.
7. Appreciation of heritage and culture: Items 1, 6, 14, and 15.
8. Developing civic responsibilities: Items 2, 3, 16, and 18.

Part II Section A1: Process of Curriculum Development

The section of the questionnaire concerning the process of curriculum development was designed to reflect the major ideas of the designer's intentions and recommendations in regards to the process of curriculum development. It also addressed the degree of participation of the teachers, supervisors, and administrators as implementors in the decision making about the content and issues of implementing it. The

following examples demonstrate this purpose:

Item 1: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that each of the following groups should participate in such development?
a. Teachers
b. Supervisors
c. Education Administrators
d. Students
e. Parents
f. Concerned groups like industry, commerce, etc.

Item 3: To what extent do you feel that your feedback to the designers was taken seriously and adopted in accomplishing each step:
a. during the curriculum development process?
b. during the curriculum implementation and yearly follow up?

Part II Section A2: Curriculum Content

The section of the questionnaire concerning the curriculum content was designed to reflect the major ideas in the designers' intentions and recommendations in regard to the choice and sequencing of topics, the degree of both horizontal and vertical integration among the various subject matter areas and within the same subject for the different grade levels. It also addressed the time allocation for each subject matter, and the degree of participation of the implementors in the decision making about the content and the issues of implementing it.

The curriculum content was designed to assist in accomplishing the goals and objectives of the curriculum according to the designers' intention as expressed by Farhan et al., 1985:

> The Omani curriculum is based on a well specified educational philosophy and objectives for each level of schooling. Also,

> the curriculum for each subject matter is designed on the basis of special objectives related to the domain of knowledge in this area and the objectives are designed in a behavioral fashion that facilitates its accomplishment and assessment. Thus, the curriculum content was designed to accommodate the knowledge as facts, concepts, skills, attitudes, and values organized in the form of learning experiences that lead the learner to achieve the objectives of each subject matter in the curriculum. The curriculum content was designed in the fashion described above and was distributed on the various grades. Integration between the topics of each curriculum and among various curricula was taken into consideration so that repetition was avoided and emphasis was placed upon the common areas of integration between the curriculum of the various subject matter areas. Content was designed to reflect both the logical sequence of the subject and the needs and interests of the learners on the other hand. (pp. 162-163)

The items in the section on curriculum content were designed to assess the degree to which these intentions were translated into actual features in the curriculum content. A part of this section consisted of items that assess the general intentions, such as the accordance between the content and the objectives, the degree and scope of integration, and the appropriateness of the time allocated for each subject based upon its proportional importance as a part of the whole curriculum. The following examples demonstrate this trend:

> Item 1: To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the content of the Secondary Mathematics Curriculum?
>
> Item 2: To what extent are the number of weekly hours allocated for teaching the curriculum sufficient for realizing the desired goals of the Mathematics Curriculum?
>
> Item 11: To what extent does the Mathematics subject matter help students develop the attitudes and habits essential for logical thinking:
>
> a. inductive reasoning: integrating the rules governing special cases and problems to arrive at a general rule?

b. deductive reasoning: applying general principles to a specific situation or case?

In addition, this section related to the details of the content and the suitability of the concepts to the level of maturity of the learners. Consideration was given to the grade level each concept was designated for and the validity of the sequencing of these concepts in each subject matter. Specifically, the general syllabus and the syllabi for each grade in particular were evaluated on the point of subject matter logic and the psychology of the learners.

Part II Section B1: Classroom Activities: Methods of Instruction

Nine items were placed in this section. These items were categorized under five categories:

1. Criteria for teaching assignments: Item 3.
2. Teacher's schedule based upon providing time for designing activities: Items 10 and 6.
3. The role of instruction in the development of learning processes and behaviors: Items 7, 8, and 9.
4. Accommodation of both course objectives and individual differences in the method of instruction: Items 2 and 1.
5. Availability of references to assist the teachers to develop their knowledge in the subject matter that they teach: Item 5.

Part II Section B2: Classroom Activities: Student Assessment

Nineteen items were placed in this section. These items were categorized under four categories:

1. Formative evaluation of students: Items 4, 6, 7, and 17.

2. Summative evaluation of students: Items 18 and 19.

3. Test construction: Items: 1, 2, 5, 8, 9, 10, 11, 12, 13, 14, and 16.

4. In-service Training on Assessment Techniques: Items 13 and 15.

Part II Section C1: Human and Physical Resources: Staff

This section contained ten items that were divided into five categories.

1. Adequacy of preservice preparation in both education and subject matter: Items 9 and 10.

2. Importance of inservice education for staff development: Items 3, 4, 6, and 7.

3. Adequacy of teacher's assignments based upon his or her qualifications: Items 1 and 5.

4. Continuity of staff development in the work place: Item 8.

5. Availability of qualified supervisory personnel: Item 2.

Part II Section C2: Physical Resources: Equipment, Facilities, and Materials.

This section contained eight items that were divided into two categories.

1. Adequacy and availability of equipment, materials, and resources: Items 2, 4, 5, 6, 7, and 8.

2. Adequacy of physical facilities: Items 1 and 3.

Part II Section D: Textbooks

This section consisted of four questions each with multiple items. The items were categorized under three categories.

1. The appropriateness in presenting knowledge to the cognitive levels of the learners: Items 1 and 2.

2. Suitability of the exercises and activities presented in the textbook: Item 3.

3. The physical appearance of the textbook: Item 4.

Part II Section E: Teacher's Manual

This section consisted of eleven questions most of which contained multiple items. The items were categorized under five categories.

1. The manual's emphasis on course objectives and subject matter: Items 4 and 10.

2. The role of the manual in facilitating the instructional activities: Items 1, 7, 8, and 11.

3. Relevance and suitability of the teachers' manual to the subject matter activities and the level of the learners: Item 3.

4. Relevance of the method of presenting the material: Items 2 and 9.

5. Shortcomings of the teachers' manual: Items 5 and 6.

In order to ascertain the validity and reliability of the instrument designed for this research project, it was deemed necessary to conduct a pilot study to determine the inter-item reliabilities for the various sections of the questionnaire.

VALIDITY OF THE INSTRUMENT USED IN THE PILOT STUDY

An instrument is said to show validity if it measures what it has been designed to measure. Although it is never possible to determine without doubt that validity has been achieved, there are a number of

steps that can be taken to increase the likelihood of achieving validity in an instrument. In this present study, these steps consisted of assuring that the general objectives and concepts being investigated were reflected in each of the questionnaire items.

To achieve this, several procedures were undertaken to meet the test of validity. First, the set of basic concepts developed from the curriculum objectives by the curriculum designers were given to a group of approximately thirty (30) teachers who were asked to confirm that the curriculum objectives indeed emphasized these concepts. Next, experts in the Department of Curriculum Development in the Omani Ministry of Education further reviewed and revised these concepts. Following this step, international experts in curriculum development and specific subject matter areas were also asked for their review of these concepts. Then, these concepts were used in the development of the questionnaire items, which were revised once more by the experts in the Department of Curriculum Development in the Omani Ministry of Education. At this point, the set of revised concepts and questionnaire items were given to a group of psychometricians for an evaluation of the adequacy of the concept representation within the questionnaire items and where necessary items were reconstructed or eliminated. Then, a factor analysis was conducted on the data collected from the questionnaires.

Finally, this factor analysis was used to group the items as an additional check to insure that the appropriate concepts were reflected in the appropriate items. Thus, the items in the questionnaires were developed to coincide strictly with the basic concepts under

investigation.

RELIABILITY OF THE INSTRUMENT USED IN THE PILOT

A pilot study was conducted to determine the inter-item reliabilities of each of the sets of questions (excluding the demographical set) involved in this present study. Given that all these scales appeared to have high inter-item reliability (see Tables 6, 7, 8, and 9), lending credibility to the accuracy of the measurement, it is possible to conclude that the degree of measurement error for this instrument is minor. What follows in this subsection is presented, therefore, only for reasons of comprehensiveness.

By definition, when the reliability of a set of items is high, the individual items tap into the same trait, hopefully the variable of interest. That is, when a scale has a high inter-item reliability, the items of that scale appear internally consistent. Therefore, it can be concluded that the measurement instrument is a precise tool for representing a single theoretical construct. In methodological terms, reliability refers to the extent of random measurement error in a scale relative to the main variable. Such error influences (weakens or attenuates) all correlates between the measured variable of interest and all others.

Inter-item reliabilities are typically expressed in the form of "Cronbach's alpha," i.e., a universally accepted coefficient for evaluating a scales' reliability or internal consistency. Error-free measurement would result in an alpha of 1. The closer the alpha is to 1 (range is between 1 and 0) the less measurement error a scale

contains which, in turn, indicates a precise representation of a construct in the given set of items.

The main purpose of this pilot study was to assess the adequacy of the instrument developed for the present study. As indicated below, the items of the pilot questionnaire were developed by a team of subject matter experts, as well as a curriculum development expert and measurement and evaluation experts. Upon completion of several revisions, the instrument used in the pilot was translated into Arabic. It should be noted that the instrument being evaluated does relate to the various aspects of teaching in the new Omani curriculum that are common to all teachers in the sample as well as to all particular subject matter areas addressed by the new Omani curriculum, i.e., Islamic Education, Arabic Language, English Language, Mathematics, Specialized Subject Matters in the Arts Section [General Science, History, Geography and Contemporary Problems, Civic Education]; Specialized Subject Matters in the Science Section [Chemistry, Physics, Biology, Human Culture].

INTER-ITEM RELIABILITIES ESTABLISHED THROUGH THE PILOT STUDY

In March of 1988, a nonrandom sample of Omani teachers working in the largest Omani school districts (the Muscat district and the Al Dhakhallyah district) was drawn to evaluate the instrument developed for the evaluation of the Omani secondary school curriculum. The total number of participating teachers in this pilot sample was 190. Tables 6 and 7 present Cronbach's alpha's for this pilot study completed by teachers.

Presented in Table 6 are the three subdivisions of the questionnaire: THEORY: Educational Theory and Omani Educational Objectives; PROCESS AND PRACTICE: Methods of Instruction and Student Assessment; and HUMAN AND PHYSICAL RESOURCES: Staff, Equipment and Materials, Textbooks, and Teacher's Manual. The reliability coefficient for educational philosophy is .822 and for Omani educational objectives is .912. In regard to process and practice the reliability coefficient is .727 for methods of instruction and .877 for student assessment. For the human and physical resources the reliability coefficient for staff is .839, for equipment, facilities, and materials is .925, for textbook is .973, and teacher's manual is .982.

Presented in Table 7 are the two subdivisions of the CURRICULUM CONTENT: Process of Curriculum Development and Curriculum Content of the Various Subject Matters. The reliability coefficient for the process of curriculum development is .941. The reliability coefficients for the curriculum content common to both the arts and science sections are Islamic Education .886, Arabic Language .983, English Language .824, and Mathematics .968. The reliability coefficients of the specialized subject matters in the arts section are General Science .962, History .987, Geography and Contemporary Problems .949, and Civic Education .956. The reliability coefficients of the specialized subject matters in the science section are Chemistry .923, Physics .951, Biology .989, and Human Culture .895.

Tables 6 and 7 reveal high inter-item reliabilities for all scales utilized in this pilot study. Therefore, 197 items pertaining to the

Table 6: Inter-item Reliabilities of the Pilot Study Theory, Process and Practice and Human and Physical Resources Teachers (N = 190)

Item	Sample Size	Reliability Coefficient
THEORY		
Educational Philosophy	190	.822
Omani Educational Objectives	190	.912
PROCESS AND PRACTICES		
Methods of Instruction	190	.727
Student Assessment	190	.877
HUMAN AND PHYSICAL RESOURCES		
Staff	190	.839
Equipment, Facilities & Materials	190	.925
Textbook	190	.973
Teacher's Manual	190	.982

theory and process and practice were included in the actual study. The process of curriculum development included 33 items. Curriculum content for the various subject matter areas contained the following number of items: Islamic Education 39 items, Arabic Language 140 items, English Language 92 items, Mathematics 103 items, General Science 124 items, History 79 items, Geography and Contemporary Problems 93 items, Civic Education 80 items, Chemistry 91 items, Physics 69 items, Biology 210 items, Human Culture 68 items. The items of the instrument were found to be reliable; therefore, the instrument was used for gathering the data for the curriculum evaluation of the Secondary Schools in Oman.

Table 7: Inter-item Reliabilities of the Pilot Study: Curriculum Process and Content
Teachers (N = 190)

Item	Subsample Size	Reliability Coefficient
CURRICULUM PROCESS & CONTENT		
PROCESS OF CURRICULUM DEVELOPMENT	187	.941
General Subject Matters		
Islamic Education	21	.886
Arabic Language	21	.983
English Language	18	.824
Mathematics	19	.968
SPECIALIZED SUBJECT MATTER (ARTS SECTION)		
General Science	15	.962
History	12	.987
Geography & Contemporary Problems	15	.949
Civic Education	12	.956
SPECIALIZED SUBJECT MATTERS (SCIENCE SECTION)		
Chemistry	16	.923
Physics	14	.951
Biology	18	.989
Human Culture	6	.895

GENERAL RESEARCH QUESTIONS

Evaluation is measured by the accordance between the designers' intentions and the implementors' perception of these intentions as reflected in the objectives, recommendations for implementation, and the curriculum content in the subject matters. In order to investigate this concept, the following general research questions were formulated:

1. Are there any significant differences among the intragroup implementers, i.e., teachers, supervisors, and administrators, in their responses given to the various items

of the questionnaire which reflects the intentions of the designers of the new Omani curriculum with regard to:

a. the role of curriculum content and practice in developing the various components of the students' personalities
b. the type of management policy in the classroom and the degree of freedom that the teacher had in choosing his or her own approaches
c. the emphasis of the curriculum centered on the student versus on the subject matter
d. the relationship of the curriculum content and every-day activities and the students' social and cultural heritage
e. the development of the critical thinking skills of the students.

2. Will the following demographic variables reflect differences that influence the responses of the teachers, supervisors, and administrators to the various items of the questionnaire?

a. gender
b. nationality
c. subject matter taught
d. school district
e. years of experience as a teacher
f. years of experience in present position as a teacher, supervisor, or administrator
g. years of experience in present position in Oman
h. educational preparation
i. length of in-service training in education

j. location of in-service training in education

k. number of workshops attended on implementation of the new Omani curriculum.

3. Will there be agreement, or disagreement, on the following five major factors between the intentions of the designers and the opinions of the implementors (teachers, supervisors, and administrators) of the new Omani curriculum?

   a. the role of curriculum content and practice in developing the various components of the students' personalities.

   b. the type of management policy in the classroom and the degree of freedom that the teacher had in choosing his or her own approaches

   c. the emphasis of the curriculum centered on the student versus on the subject matter

   d. the relationship of the curriculum content and every-day activities and the students' social and cultural heritage

   e. the development of the critical thinking skills of the students.

4. If the responses of the implementors (teachers, supervisors, administrators) are used as an independent variable, will it be possible to compare the differences in their responses according to their position in the educational system?

5. What knowledge and opinions do the parents of the students enrolled in the preparatory schools have of the new Omani curriculum?

6. To what extent do the students enrolled in the secondary

schools in Oman assess the success of the Omani curriculum for the secondary schools in achieving the following objectives:

a. Holistic development of the learner's personality

b. Centering the curriculum around the learner's needs and interests.

c. Incorporating the student's everyday activities and their social and cultural heritage in the curriculum together with the scientific and technological aspects of the present era?

d. Development of their thinking abilities

7. To what extent do the students of the secondary school in Oman feel that they have benefited from studying the subject matter areas shared between the Arts and Science concentrations:

a. Islamic Education

b. Arabic Language

c. English Language

d. Mathematics

8. To what extent do students in the Art section feel that they have benefited from studying the specialized subject matter areas for the Arts:

a. History

b. Geography and Contemporary Problems

c. Civic Education

d. General Science

9. To what extent do the students in the Science Concentration feel that they have benefited from studying the specialized subject matter areas from the Science Section?
   a. Chemistry
   b. Physics
   c. Biology
   d. Human Culture
10. To what extent do the secondary school students assess the quality and efficiency of the following components of the secondary school curriculum?
   a. Methods of instruction?
   b. Techniques of student evaluation?
   c. Physical facilities, equipment and materials needed to implement the curriculum in their schools?
   d. Textbooks in the subject matter areas they have studied in the secondary school?
11. Are there significant differences in the judgment of the students of the previous components due to differences in their concentration of study (Art/Science)?
12. To what extent do the secondary school graduates assess the success of the secondary school curriculum in achieving the following objectives:
   a. Holistic development of the learner's personality?
   b. Providing students with skills needed to continue learning on their own through self-learning?
   c. Providing them with the knowledge and skills needed to

pursue higher education or start a career?

13. To what extent do the secondary school graduates feel that the Omani secondary school curriculum has reflected the following traits?
    a. incorporation of student life activities and their social and cultural heritage?
    b. up-to-date topics that reflect the scientific and technological advances characteristic of the present era?
    c. quality and availability of physical facilities, equipment and materials needed to implement the curriculum?
    d. quality and efficiency of the textbooks?
    e. efficiency of the methods of instruction and techniques of student evaluation suggested in the Omani secondary school curriculum?
14. Are there significant differences in the opinions of the secondary school graduates regarding the previous aspects due to the difference in their concentration of study in the secondary school (Art/Science)?

Chapter 5

DATA ANALYSIS AND RESULTS

I. DATA COLLECTION

A letter from the Office of H.E. the Minister of Education was sent to the directors of all school districts. This letter informed the directors of the project's objectives and requested that a random selection of the required number of individuals (teachers, supervisors, and administrators as well as parents, graduates, and students) be made. The directors were also asked to assemble these respondents at given locations and times. The administration of the questionnaire was performed under the direction of the curriculum supervisors who had previously completed a half-day workshop concerning the administration of this instrument.

The questionnaire was essentially a self-report by the respondent using a five-point scale where 5 represents strong agreement. Such Likert scales are helpful; as Babbi (1979) pointed out, "the Likert is associated with questions for math that is used in contemporary questionnaires . . . the respondent is presented with a statement in the questionnaire and is asked to indicate whether he 'strongly agrees,' 'agrees,' 'disagrees,' 'strongly disagrees,' or is 'uncertain'."

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The completed questionnaires were returned to a central location and transcribed onto coded "mark-sense" Educational Testing Service sheets (ETS). Information bits from these scoring sheets were entered onto the IBM 3081 located at the State University of New York at Buffalo. The pre-coded information bits were verified to insure that each variable's value was entered within the limits set.

II. RELIABILITY OF THE INSTRUMENT FOR THE ENTIRE SAMPLE

In order to confirm the reliability of the instrument obtained from the pilot, a second inter-item reliability test of the entire sample was conducted. As indicated in Chapter 4, the sample consisted of 843 teachers and 99 supervisors. Table 8 presents the Cronbach alpha's for teachers categorized by the three major subdivisions: Theory, Process and Practice, and Resources.

For the first major subdivision, theory, the reliability coefficients are .901 for educational philosophy and .948 for Omani educational objectives. For the second major subdivision, process and practice, the reliability coefficients are .873 for method of instruction and .944 for student assessment. For the third major subdivision, resources, the reliability coefficients are .901 for staff; .938 for equipment, facilities, and materials; .977 for textbook; and .987 for teacher's manual.

Table 8: Inter-item Reliabilities of the Total Sample Included in the Study: Teachers (N = 843).

	Sample Size	Reliability Coefficient
THEORY		
Educational Philosophy	843	.901
Omani Educational Objectives	843	.948
PROCESS & PRACTICE: CLASSROOM ACTIVITIES:		
Method of Instruction	843	.873
Student Assessment	843	.944
HUMAN & PHYSICAL RESOURCES		
Staff	843	.901
Equipment, Facilities, & Materials	843	.938
Textbook	843	.977
Teacher's Manual	843	.987

Presented in Table 9 are the inter-item reliabilities for the two subdivisions of the curriculum content, process of curriculum development, and curriculum content of the various subject matters. The reliability coefficient for the process of curriculum development is .937. The reliability coefficients for the curriculum content of both the arts and sciences sections are: Islamic Education .981, Arabic Language .990, English Language .939, and Mathematics .976. The reliability coefficients of the specialized subject matters in the arts section are: General Science .990, History .976, Geography and Contemporary Problems .968, and Civic Education .969. The reliability coefficients of the specialized subject matters in the

science section are: Chemistry .988, Physics .951, Biology .992, and Human Culture .966.

Table 9: Inter-item Reliabilities of the Total Sample Included in the Study: Teachers (N = 843).

	Subsample Size	Reliability Coefficient
CURRICULUM		
PROCESS OF CURRICULUM DEVELOPMENT	843	.937
CURRICULUM CONTENT		
GENERAL SUBJECT MATTERS		
Islamic Education	88	.981
Arabic Language	117	.990
English Language	117	.939
Mathematics	112	.976
SPECIALIZED SUBJECT MATTERS (ARTS SECTION)		
General Science	31	.990
History	65	.976
Geography & Contemporary Problems	74	.968
Civic Education	40	.969
SPECIALIZED SUBJECT MATTERS (SCIENCE SECTION)		
Chemistry	55	.988
Physics	57	.951
Biology	54	.992
Human Culture	33	.966

In order to confirm the reliability of the instrument obtained from the pilot study and the entire sample, a third inter-item reliability test of the entire sample of supervisors was conducted as presented in Tables 10 and 11. For the first major subdivision, theory, the reliability coefficients are: .952 for educational philosophy and .969

for Omani educational objectives. For the second major subdivision, process and practice, the reliability coefficients are: .916 for method of instruction and .965 for student assessment techniques. For the third major subdivision, human and physical resources, the reliability coefficients are: .822 for staff; .886 for equipment, facilities, and materials; .965 for textbook; and .977 for teacher's manual.

Table 10: Inter-item Reliabilities of the Total Sample Included in the Study: Supervisors (N = 99).

	Subsample Size	Reliability Coefficient
THEORY		
Educational Philosophy	99	.952
Omani Educational Objectives	99	.969
PROCESS & PRACTICE: CLASSROOM ACTIVITIES:		
Method of Instruction	99	.916
Student Assessment	99	.965
HUMAN & PHYSICAL RESOURCES		
Staff	99	.822
Equipment, Facilities, & Materials	99	.886
Textbook	99	.965
Teacher's Manual	99	.977

Presented in Table 11 are the inter-item reliabilities for the two subdivisions of the curriculum content, process of curriculum development and curriculum content of the various subject matters. The reliability coefficient for the process of curriculum development is .946. The reliability coefficients of the curriculum content for both

the arts and sciences sections are: Islamic Education .928, Arabic Language .976, English Language .905, and Mathematics .966. The reliability coefficients of the specialized subject matters in the arts section are: General Science .983, History .980, Geography and Contemporary Problems .978 and Civic Education .981. The reliability coefficients of the specialized subject matters in the science section are: Chemistry .906, Physics .786, Biology .981, and Human Culture .982.

The three groups tested for inter-item reliability [in the pilot study (N = 190), the total sample of teachers (N = 843), and the total sample supervisors (N = 99)] resulted in

Table 11: Inter-item Reliabilities of the Total Sample Included in the Study: Supervisors (N = 99).

	Subsample Size	Reliability Coefficient
CURRICULUM		
PROCESS OF CURRICULUM DEVELOPMENT	99	.946
CURRICULUM CONTENT		
GENERAL SUBJECT MATTERS		
Islamic Education	12	.928
Arabic Language	16	.976
English Language	19	.905
Mathematics	9	.966
SPECIALIZED SUBJECT MATTERS (ARTS SECTION)		
General Science	6	.983
History	8	.980
Geography & Contemporary Problems	7	.978
Civic Education	6	.981
SPECIALIZED SUBJECT MATTERS (SCIENCE SECTION)		
Chemistry	6	.906
Physics	3	.786
Biology	4	.981
Human Culture	3	.982

a cluster of low inter-item reliabilities .786 to .937 and a cluster of high inter-item reliabilities .977 to .992. Thus, the instrument is considered to be reliable for this study. It should be mentioned that the validity of the instrument was previously discussed in Chapter 4 on page 127.

III. DESCRIPTIVE DATA ANALYSIS

The data collected from teachers, supervisors, administrators, students, graduates, and parents was analyzed in two ways. First, the responses given by each subject group to a collection of related questionnaire items was summarized descriptively. Second, by using parametric statistical analyses, variations in the type of response given to each questionnaire section were assessed as a function of existing differences in demographic and academic background and attitude toward educational philosophy among subjects of each subject group and differences between subject groups. All descriptive and statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS/x version 3.0) computer programs.

The responses given to groups of related questionnaire items by teachers, supervisors, administrators, students, graduates, and parents are described briefly by the magnitude and quality of the responses given to the items that make up a particular group. The description focuses first on the overall mean response of the subject group(s)

and, second, on those specific items that elicited the most polar responses.

As described in Chapter 4, the subject's response to each items was based on a 5 point scale, 5 indicating that the individual fully agreed, or found full satisfaction, with the item and 1 indicating that the individual rarely agreed, or found little satisfaction, with the item. The words used here to qualitatively interpret each point on the scale are as follows:

quantitative score	qualitative interpretation
5	'fully', strongly agree, 'always'
4	'greatly', agree, 'to a great extent'
3	'sometimes', neither agree nor disagree
2	'seldom', disagree
1	'rarely', strongly disagree

A more detailed item-by-item analysis of the mean responses and frequency of each response type (5 through 1) can be found in Appendix B.

A. Teachers, Supervisors, Administrators

The questionnaire given to teachers, supervisors, and administrators was grouped by the four theoretical categories: Theory; Process and Practice; Resources; and Curriculum Content. The overall content and the source of the questionnaire items that comprise each category within the questionnaire given to teachers, supervisors and administrators are listed below.

Theory:
Part I Section B (part 1): Educational Philosophy
Part I Section B (part 2): Omani Educational Objectives

Process and Practice:
Part II Section B (part 1): Classroom Activities: Methods of Instruction
Part II Section B (part 2): Classroom Activities : Student Assessment Techniques

Resources:
Part II Section C (part 1): Human Resources: Staff
Part II Section C (part 2): Physical Resources: Facilities, Equipment, Materials
Part II Section D: Textbooks
Part II Section E: Teacher's manual

Curriculum Content:
Part II Section (part 1): Process of the Curriculum Content
Part II Section A (part 2)[1]: Subject Matter Content
Islamic Education;
Arabic Language;
English Language;
Mathematics;
General Sciences;
History;
Geography and Contemporary Problems;
Civic Education;
Chemistry;
Physics
Biology;
Human Cultures

Administrators were <u>not</u> given portions of the questionnaire addressing 'textbooks' and the 'teacher's manual' RESOURCES or CURRICULUM CONTENT.

1. <u>Theory</u>

a. Educational Philosophy (Part I Section B part 1)

Items on Educational Philosophy assessed the attitude of the teacher, supervisor, and administrator toward five concepts, referred to as factors. The mean response by each subject to the items that define each factor was used

1 Teachers and supervisors responded to only those items that addressed the subject matter that they taught or supervised.

subsequently to classify the subject as either in strong agreement, in agreement, or in disagreement with the factor. The extent to which the subject's educational philosophy toward these five factors influenced his or her response to other questionnaire sections was assessed and will be described in greater detail later. The five factors described by the items in the Educational Philosophy portion of the questionnaire (Part I Section B part 1) are listed below along with the specific questionnaire items that defined each factor (in parentheses below each factor).

What is the importance of . . .

Factor I. ... developing the students' personality?

[Item IB.1 1: The Curriculum should consist of subject matter to be learned and skills to be acquired.]

[Item IB.1 2: The learning of proper attitudes is often more important than the learning of subject matter.]

[Item IB.1 3: It is more important that the student learn how to approach and solve problems than it is for him to recall information included in the subject matter.]

[Item IB.1 4: The true view of education is to so arrange learning that the student gradually build up a storehouse of knowledge that he can use in the future.]

[Item IB.1 7: The goals of education should be defined in accordance with the students' interests and needs, as well as by the demands of society.]

Factor II. ...promoting a democratic approach in teaching?

[Item IB.1 5: Teachers should keep in mind that students have to be made to work.]

[Item IB.1 10: Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to something as important as teaching tomorrow's citizens.]

[Items IB.1 16: True discipline springs from interests, motivation, and involvement in problems relevant to the student.]

Factor III. ...emphasizing the student-centered curriculum?

[Item IB.1 6: Standards of achievement should not be the same for all students: they should vary with the student.]

[Item IB.1 8: Right from the very first grade, teachers must teach the student at the level of his ability and not at the level of the grade he is in.]

[Item IB.1 9: Each subject and activity should be aimed at developing a particular part of the student's makeup: intellectual, social, physical, or spiritual.]

[Item IB.1 12: We should fit the curriculum to the student and not the student to the curriculum.]

[Items IB.1 13: Subjects that sharpen the mind, like mathematics and sciences, need greater emphasis in the Omani school curriculum.]

Factor IV. ...integrating social and cultural heritage into the curriculum?

[Item IB.1 11: In Omani schools, learning which is organized around life experiences is more desirable than learning organized around subject matter.]

[Item IB.1 14: The healthy interaction among students is just as important in school as the learning of subject matter.]

[Item IB.1 15: The curriculum should contain an orderly arrangement of subjects that represent the best of the Omani cultural heritage.]

[Item IB.1 17: Emotional development and social development are as important in the evaluation of a student's progress as academic achievement.]

Factor V. ...developing the students' thinking abilities?

[Item IB.1 18: Students should be taught that all problems should be subjected to critical and objectives analysis, whether the problems are religious, moral, economic, or social in nature.]

[Item IB.1 19: Learning is experimental; the students should be taught to test alternatives before accepting any of them.]

Table 12 lists the overall mean response to each factor by teachers, supervisors, and administrators. In sum, the overall mean response to each factor by teachers, supervisors, and administrators was very favorable and indicated qualitatively that each group agreed or even strongly agreed with the concepts defined by each factor.

Table 12: Overall mean response by teachers, supervisors and administrators to each of the five factors.

	TEACHERS $\bar{X}$ (S.D.) (n)	SUPERVISORS $\bar{X}$ (S.D.) (n)	ADMINISTRATORS $\bar{X}$ (S.D.) (n)
Factor I	4.07 (0.71) (840)	3.79 (1.07) (99)	4.28 (0.50) (75)
Factor II	4.09 (0.88) (835)	3.79 (1.15) (99)	4.36 (0.66) (75)
Factor III	4.18 (0.79) (835)	3.76 (1.10) (99)	4.31 (0.60) (75)
Factor IV	4.01 (0.74) (840)	3.63 (1.03) (99)	4.19 (0.60) (75)
Factor V	4.03 (0.91) (797)	3.60 (1.07) (97)	4.19 (0.72) (75)

Only small differences were obtained when teachers and supervisors were subdivided further by the subject matter area that they taught or supervised. Table 13 and 14 present the mean response to each factor by teachers and supervisors from each of the twelve subject matter areas. Teachers and supervisors of Islamic Education gave the least positive responses to the factors. Islamic Education teachers, overall, agreed with the concepts identified by each factor, while Islamic Education supervisors, in contrast to all other educators, tended to disagree with the concepts defined by each factor.

b. Omani Educational Objectives (Part I Section B part 2)

Teachers, supervisors, and administrators reported that the Omani educational objectives were accomplished 'sometimes' or 'to a great extent' of the time [mean responses (+/- s.d.) were 3.88 (.68), 3.52 (.89), and 4.09 (.47), respectively].

Among teachers item 5 drew the most positive response. (mean = 4.40 +/- 1.05). This item asked "to what extent the Omani curriculum promoted an awareness that learning is a life-long process". Fifty percent or more of the teachers indicated that the objective outlined by this item, along with those objectives outlined by items 1, 9, 21 and 23, were fully realized in the Omani curriculum. The content of

Table 13: Overall mean response to each of the five factors by teachers of each subject matter area.

	FACTOR				
	I $\bar{X}$ (S.D.) (n)	II $\bar{X}$ (S.D.) (n)	III $\bar{X}$ (S.D.) (n)	IV $\bar{X}$ (S.D.) (n)	V $\bar{X}$ (S.D.) (n)
Islamic Education	3.61 (1.24) (88)	3.67 (1.43) (88)	3.74 (1.40) (88)	3.57 (1.20) (88)	3.70 (1.33) (82)
Arabic Language	4.13 (0.67) (117)	4.10 (0.81) (117)	4.22 (0.76) (117)	4.13 (0.59) (117)	4.10 (0.85) (111)
English Language	3.90 (0.63) (116)	3.77 (1.02) (114)	3.79 (0.70) (114)	3.71 (0.69) (116)	3.50 (0.96) (100)
Mathematics	4.14 (0.49) (112)	4.17 (0.68) (112)	4.39 (0.63) (112)	4.03 (0.65) (112)	4.20 (0.76) (107)
General Science	3.91 (0.58) (30)	3.97 (0.69) (30)	4.16 (0.72) (30)	3.96 (0.73) (30)	4.14 (0.92) (29)
History	4.25 (0.64) (65)	4.37 (0.65) (65)	4.40 (0.53) (65)	4.22 (0.64) (65)	4.06 (0.76) (65)
Geography	4.29 (0.49) (73)	4.32 (0.62) (73)	4.37 (0.56) (73)	4.31 (0.53) (73)	4.04 (0.70) (73)
Human Culture	4.19 (0.63) (33)	4.25 (0.80) (33)	4.29 (0.67) (33)	4.24 (0.63) (33)	4.31 (0.85) (32)
Civic Education	4.34 (0.53) (40)	4.42 (0.63) (40)	4.29 (0.68) (40)	4.41 (0.59) (40)	4.31 (0.80) (39)
Chemistry	4.14 (0.49) (55)	4.19 (0.60) (55)	4.29 (0.47) (55)	3.97 (0.54) (55)	4.32 (0.60) (53)
Physics	4.09 (0.54) (57)	4.21 (0.58) (57)	4.28 (0.59) (57)	3.98 (0.55) (57)	4.06 (0.84) (56)
Biology	4.12 (0.66) (54)	4.14 (0.77) (51)	4.33 (0.62) (51)	4.11 (0.64) (54)	4.25 (0.77) (50)

Table 14: Overall mean response to each of the five factors by supervisors of each subject matter area.

	FACTOR				
	I $\bar{X}$ (S.D.) (n)	II $\bar{X}$ (S.D.) (n)	III $\bar{X}$ (S.D.) (n)	IV $\bar{X}$ (S.D.) (n)	V $\bar{X}$ (S.D.) (n)
Islamic Education	1.77 (0.62) (12)	1.39 (0.42) (12)	1.75 (0.32) (12)	1.60 (0.56) (12)	1.88 (0.53) (12)
Arabic Language	4.10 (0.99) (16)	4.13 (1.12) (16)	4.08 (1.06) (16)	4.20 (0.79) (16)	4.00 (0.88) (16)
English Language	3.54 (0.85) (19)	3.68 (0.68) (19)	3.34 (0.91) (19)	3.35 (0.80) (19)	3.19 (1.07) (18)
Mathematics	3.89 (0.56) (9)	4.02 (0.63) (9)	4.07 (0.63) (9)	3.78 (0.63) (9)	3.56 (0.81) (9)
General Science	4.32 (0.27) (6)	4.22 (0.69) (6)	4.37 (0.38) (6)	4.04 (0.19) (6)	4.30 (0.76) (5)
History	4.60 (0.30) (8)	4.38 (0.55) (8)	4.53 (0.37) (8)	4.31 (0.40) (8)	4.25 (0.60) (8)
Geography	4.49 (0.69) (7)	4.19 (0.81) (7)	4.29 (0.73) (7)	4.00 (0.78) (7)	3.86 (0.63) (7)
Human Culture	4.00 (1.04) (3)	4.22 (0.84) (3)	3.67 (1.03) (3)	3.83 (0.58) (3)	4.00 (1.00) (3)
Civic Education	4.27 (0.85) (6)	4.28 (0.53) (6)	4.10 (0.98) (6)	3.88 (0.77) (6)	3.75 (0.82) (6)
Chemistry	4.03 (0.32) (6)	4.22 (0.46) (6)	4.30 (0.49) (6)	4.06 (0.26) (6)	4.17 (0.41) (6)
Physics	4.18 (0.50) (3)	4.56 (0.39) (3)	4.40 (0.20) (3)	4.00 (0.25) (3)	4.00 (1.00) (3)
Biology	4.45 (0.41) (4)	4.75 (0.32) (4)	4.69 (0.19) (4)	4.35 (0.46) (4)	4.75 (0.29) (4)

items 1,9,21, and 23 are given below along with the mean response given to each item by teachers .

Item IB.2 1: To what extent does the Omani curriculum develop a loyalty to the Omani society? [mean response (+/- s.d.) = 4.32 (1.06)]

Item IB.2 9: To what extent does the Omani curriculum promote a positive attitude toward learning and inquiry? [mean response (+/- s.d.) = 4.25 (1.00)]

Item IB.2 21: To what extent does the Omani curriculum encourage an awareness and knowledge of scientific processes, mechanisms, and effects? [mean response (+/- s.d.) = 4.22 (.96)]

Item IB.2 23: To what extent does the Omani curriculum promote an ability and desire to use language correctly in writing or talking? [mean response (+/- s.d.) = 4.26 (1.00)]

Supervisors, like teachers, gave their strongest support to items 5 and 9 (mean responses 3.99 +/- 1.36 and 4.00 +/- 1.24 respectively). Forty percent or more of all supervisors reported that these two objectives, 'learning as a lifelong process' (Item 5) and 'developing a positive attitude toward learning and inquiry' (Item 9) are 'fully' achieved by the Omani curriculum. Furthermore, these objectives, among all other objectives, are most successfully realized. Other items drawing a strong positive response from supervisors are listed below with the mean response (+/- s.d.) given to each item by supervisors.

These items address several objectives including the development of scientific inquiry (item 22), the development of national loyalty (item 1), and the development of social awareness and social views (items 4 and 7).

Item IB.2 1: To what extent does the Omani curriculum develop a loyalty to the Omani society? [mean response (+/- s.d.) = 3.80 (1.36)]

Item IB.2 4: To what extent does the Omani curriculum develop and encourage desirable scientific and social views? [mean response (+/- s.d.) = 3.80 (1.20)]

Item IB.2 7: To what extent does the Omani curriculum promote an appreciation for the diversity of human behavior, beliefs, and customs? [mean response (+/- s.d.) = 3.90 (1.17)]

Item IB.2 10: To what extent does the Omani curriculum reflect skills in analyzing issues and problems? [mean response (+/- s.d.) = 3.83 (1.26)]

Item IB.2 22: To what extent does the Omani curriculum develop positive attitudes toward scientific knowledge and methods? [mean response (+/- s.d.) = 3.85 (1.20)]

The strongest positive response to an educational objective item by administrators was drawn by item 1 [mean response (+/- s.d.) = 4.73 (.65)], that asked to what extent the Omani educational curriculum 'developed loyalty to the Omani society'. Eighty percent of all administrators reported that this objective was fully achieved by the Omani curriculum. Like teachers and supervisors, administrators

also gave strong support for items 5 and 9 [mean response (+/- s.d.) = 4.67 (.74) and 4.45 (.81), respectively]. In addition, more than 60 percent of all administrators indicated that the Omani curriculum had fully realized the following objectives.

Item IB.2 6: To what extent does the Omani curriculum facilitate the capacity to experience multiple loyalties and identities? [Mean response (+/- s.d.) = 4.54 (.72)]

Item IB.2 22: To what extent does the Omani curriculum develop positive attitudes toward scientific knowledge and methods? [Mean response (+/- s.d.) = 4.47 (.81)]

Item IB.2 24: To what extent does the Omani curriculum facilitate an ability to relate the Omani curriculum to everyday life? [Mean response (+/- s.d.) = 4.41 (.89)]

The least positive responses given to educational objective items by teachers, supervisors, and administrators still indicated, qualitatively, that the objectives were meet 'sometimes' or 'to a great extent'. These items are listed below along with the mean responses (+/- s.d.) of teachers, supervisors, and administrators. Typically the objectives outlined by these items addressed the development of learning outcomes.

Item IB.2 26b: To what extent does the Omani educational curriculum especially aim to develop student achievement on comprehension: understanding what is being communicated but not necessarily relating it to other things? [Mean responses (+/- s.d.) of teachers = 3.21 (1.20); supervisors = 3.18 (1.06); and administrators = 3.59 (1.17)].

Item IB.2 28: To what extent is there evidence that attention is being given to coordination and integration of the Omani educational curriculum among the various subject matters? [Mean responses (+/- s.d.) of teachers = 3.48 (1.03) and supervisors = 3.10 (1.08)]. (Administrators response to this item was not one of their least positive responses.)

Item IB.2 29: To what extent are efforts made to follow up the progress of students (from 1st to 3rd grade), to determine that the sequencing and content of the subject matter is meeting the needs of the Omani student? [Mean response (+/- s.d.) of teachers = 3.64 (1.04); supervisors = 3.20 (.96); and administrators = 3.48 (.94)].

Examining the mean responses given by teachers or supervisors of each subject matter area, revealed only one deviation from the mean responses given by teachers or supervisors as a whole. Among Islamic Education supervisors, the overall mean response (+/- s.d.) to the educational objective items was 1.88 (.48), indicating that these supervisors (n = 12) found the Omani educational

objectives either unacceptable or 'seldom' applied in the Islamic Education curriculum.

2. Process and Practice

a. Classroom Activities: Methods of Instruction (Part II Section B part 1)

Teachers, supervisors, and administrators all indicated that methods of classroom instruction recommended by the curriculum were 'sometimes' to 'greatly' satisfactory and/or successful in implementation [mean responses (+/- s.d.) were 3.48 (.71), 3.27 (.77), and 3.67 (.59), respectively].

Among teachers, the strongest positive response was given to item 2 that assessed the extent to which teachers use the different methods of instruction suggested by the curriculum to suit below average, average, and superior students [mean response (+/- s.d.) = 3.83 (.96)]. Seventy percent of all teachers indicated that they almost 'always' use the suggested methods of instruction to help them to meet the various levels of student achievement.

The strongest positive responses from supervisors and administrators were given items 3a and 3b. These two items asked to what extent teaching assignments are given to teachers on the basis of academic background (item 3a) and teaching experience (item 3b). The mean responses given to these two items by supervisors [mean responses (+/- s.d.) = 3.84 (1.20) for item 3a and 3.79 (1.27) for item 3b] and

administrators [mean responses (+/- s.d.) = 4.60 (.74) for item 3a and 4.45 (.81) for item 3b) indicate that teaching experience and academic background are viewed by both supervisors and administrators as (a) most fully applied among all method of instruction items; and (b) highly important criterion for teaching assignments, more important than the teacher's preference [mean responses (+/- s.d.) = 3.45 (1.21) for supervisors and 3.64 (1.23) for administrators]. Teachers also rated these two item positively [mean responses (+/- s.d.) = 3.79 (1.25) and 3.78 (1.25) items 3a and 3b respectively] relative to their mean response (+/- s.d.) to all methods of instruction items combined [3.48 (.71)]. Overall, more than 65 percent of all teachers and supervisors and more than 90 percent of all administrators indicated that teaching assignments are 'greatly' or 'fully' determined by the teacher's academic background and/or experience.

Items 4 and 5 drew the least positive responses from all three educator groups. Teachers, supervisors, and administrators indicated, in response to item 4, that there is 'seldom' to 'sometimes' enough time to design activities to help implement or improve the Omani curriculum [mean responses (+/- s.d.) = 2.78 (1.25), 2.78 (1.12), and 3.05 (1.14) respectively]. In response to item 5, teachers, supervisors, and administrators indicated that the libraries are 'seldom' to 'sometimes' satisfactory in terms of

educational and/or professional books, periodicals, and newsletters [mean response (+/- s.d.) = 2.96 (1.30), 2.80 (1.14), and 2.81 (1.17) respectively]. Typically, 30 to 40 percent of all teachers, supervisors, and administrators indicated that these items were 'seldom' or 'rarely' satisfactory.

Finally, when the responses given by teachers and supervisors were assessed in light of the subject matters that they taught, the overall pattern remained the same for teachers and, with one exception, for supervisors. Supervisors of Islamic Education reported far less satisfaction with the method of instruction items [mean response (+/- s.d.) = 2.29 (.53)] than any other teacher or supervisor group. The mean response of this group suggests that the Islamic Education supervisors are in fact rarely satisfied with or rarely using the methods of instruction outlined by the Omani curriculum.

b. Classroom Activities: Student Assessment Techniques (Part II Section B part 2)

The teacher and administrator responses to student assessment technique items suggests that teachers and administrators are near 'greatly' satisfied with the student assessment techniques [mean response (+/- s.d.) = 3.70 (.60) and 3.67 (.50) respectively]. Supervisor response suggests that they were only 'sometimes' satisfied with the student

assessment techniques [mean response (+/- s.d.) = 3.32 (.75)].

Those items that drew the most strongly positive responses from teachers are items 4, 5b, 8a whose content are listed below.

Item IIB.2 4: To what extent do teachers provide a continual (daily, lesson-by-lesson, or unit-by-unit) evaluation of students in a normative manner? [Mean response (+/- s.d.) = 4.04 (.95).]

Item IIB.2 5b: To what degree do your tests assess comprehension? [Mean response (+/- s.d.) = 4.19 (.86)]

Item IIB.2 8a: To what degree do you prefer that the tests in Secondary school be made by teachers? [Mean response (+/- s.d.) = 4.11 (1.19)].

Supervisors also favored testing by teachers (item 8a) and among all other assessment technique items, they gave this item one of their most strongly positive scores [mean response (+/- s.d.) = 3.74 (1.27)]. Several other items should be mentioned as examples of assessment technique items that drew the most positive response from supervisors. These items, excluding item 8a mentioned earlier, are listed below with the mean responses (+/- s.d.) that they drew. More than 60 percent of all supervisors found the content of these items 'greatly' to 'fully' satisfactory.

Item 12: To what degree are the tests representative of different test items types (e.g. true-false, completions, multiple choice, etc.)? [Mean response (+/- s.d.) = 3.79 (1.18)]

Item 13: To what degree are test instructions clear and explicit? [Mean response (+/- s.d.) 3.69 (.97)].

Item 19: To what degree are tests used to provide data from which reports to parents and transcript are prepared? [Mean response (+/- s.d.) = 3.67 (1.19)]

Two items, 16b and 19, drew the strongest positive response from administrators. The content of these items is given below along with the mean response (+/- s.d.) given by administrators to each item. Overall, more than 80 percent of the administrators found the student assessment techniques to be 'greatly' or 'fully' true.

Item 16b: To what degree are test grades based on normative reference? [Mean response (+/- s.d.) = 4.51 (.83)]

Item 19: To what degree are tests used to provide data from which reports to parents and transcript are prepared? [Mean response (+/- s.d.) = 4.35 (.86)]

Item 1a that asked to what extent teachers planned to use non-written performance tests, drew the least positive response from all three educator groups [mean response (+/- s.d.) of 2.92 (1.20) for teachers, 2.81 (1.10) for supervisors and 2.77 (1.28) for administrators].

Teachers also gave weak support to items 8b and 8c that asked to what degree teachers would prefer that tests be prepared by the school (8b) or the school district (8c) [mean responses (+/- s.d.) = 3.11 (1.28) and 3.18 (1.38) respectively]. Qualitatively then, teachers preferred that tests most often be prepared by them [item 8a, mean response (+/- s.d.), reported earlier as 4.11 (1.22)] and only 'sometimes' by the school or school district.

Supervisors gave weak support to item 3 [mean response (+/- s.d.) = 2.95 (.94)] in addition to item 1a. Item 3 assessed to what degree supervisors thought secondary school teachers received enough in-service training on assessment and performance measures. Thirty-five percent of the supervisors indicated that teachers 'seldom' or 'rarely' receive enough in-service training on these measures, while 60 percent indicated that teachers 'sometimes' or 'to a great extent' received enough in-service training on assessment techniques.

Administrators gave weak support to 16a in addition to 1a mentioned earlier. The administrators' response to item 16a, ('to what degree are test grades based on criterion references?') taken together with their response to item 16b ('to what degree are test grades based on normative reference?') suggests that administrators think that test grades are typically based on normative reference (mean response (+/- s.d.) = 4.51 (.83)] and atypically based on criterion reference [mean response (+/- s.d.) = 2.69 (1.16].

Finally, when the responses given by teachers and supervisors were assessed in light of the subject matters they taught or supervised, the overall pattern remained the same for teachers and, with one exception, supervisors. Supervisors of Islamic Education reported far less satisfaction with the student assessment technique items [mean response (+/- s.d.) = 2.14 (.50)] than any other

supervisor or teacher group. The mean response of this group suggests that Islamic Education supervisors are, in fact, rarely satisfied with or rarely use the recommended student assessment techniques. The highly negative responses by Islamic Education supervisors may be a contributing factor to the differences in mean response to student assessment technique items between supervisors as a group and by teachers as a group and administrators. Recall that the mean response (+/- s.d.) to the student assessment technique items by teachers (as a group) and administrators was 3.80 (.60) and 3.67 (.50) respectively, while by supervisors (as a group) it was 3.32 (.75).

3. Resources

a. Human Resources: Staff (Part II Section C part 1)

The mean response to these items by teachers, supervisors, and administrators indicated that all three groups found the quality and availability of the educational staff 'somewhat' satisfactory [mean responses (+/- s.d.) were 3.30 (.74) for teachers, 3.16 (.75) for supervisors, and 3.48 (.61) for administrators].

The strongest positive responses given by teachers fell to items 2 and 10 that assessed the adequacy in number of supervisory staff [item 2: mean response (+/- s.d.) = 3.71 (1.17)] and the adequacy of teachers in professional preparation in their subject matter [item 10: mean response

(+/- s.d.) = 3.73 (.94)]. More than 60 percent of all teachers indicated that they were 'greatly' or 'fully' satisfied with the content of these two items.

Both supervisors and administrators gave their strongest positive response to item 5, that assessed the adequacy of school policies for the review of teaching assignments (regarding academic teaching history and qualifications) [mean responses (+/- s.d.) of 3.50 (1.10) for supervisors and 4.19 (.85) for administrators]. Over 50 percent of the supervisors and 80 percent of the administrators indicated that they were 'greatly' or 'fully' satisfied with the current school policies for reviewing teaching assignments.

Teachers, supervisors, and administrators were least satisfied with item 3 that assessed the degree to which teachers are given release time for in-service training in the implementation of the Omani curriculum [mean responses (+/- s.d.) of 2.76 (1.27) for teachers , 2.98 (1.18) for supervisors, and 2.95 (1.30) for administrators]. The qualitative interpretation of these mean responses, however, does not differ distinctly from that interpretation given to the mean response to all staff items together.

Inspecting the mean responses given to these items by teachers and supervisors of each subject matter area did not reveal any distinctive differences among teachers. However, among supervisors, those specialized in Islamic Education

and Civics Education, tended to report far less satisfaction. Supervisors collectively reported that they were 'somewhat' satisfied with the quality and availability of the staff [mean response (+/- s.d.). The response of supervisors across the subject matter areas was 3.16 (.75)], supervisors of Islamic Education [mean response (+/- s.d.) = 2.38 (.54)] and Civics Education [mean response (+/- s.d.) = 2.68 (.71)] were more likely to report that they were 'seldom' satisfied with the availability and quality of the staff.

b. Physical Resources: Equipment, Facilities, and Materials (Part II Section C part 2)

Teachers, supervisors, and administrators rated the adequacy and availability of the equipment, materials and facilities similarly [mean response (+/- s.d.) = 3.10 (.80) for teachers, 3.16 (.69) for supervisors, and 3.27 (.74) for administrators], thus indicating, that qualitatively they were only 'somewhat' satisfied with the physical resources.

All three groups gave their greatest level of satisfaction to three aspects of the facilities: classroom number and size [mean responses (+/- s.d.) to item 1 were 3.95 (1.09) for teachers, 3.82 (1.13) for supervisors, 4.11 (1.03) for administrators], classroom ventilation [mean responses (+/- s.d.) to item 3a were 4.16 (1.02) for teachers, 4.03 (1.21), for supervisors, and 4.37 (.97) for

administrators], and number of electrical outlets [mean response (+/- s.d.) to item 3b were 3.96 (1.15) for teachers, 3.87 (1.25) for supervisors, 4.26 (.86) for administrators]. To each of these items, more that 70 percent of the teachers, supervisors, and administrators indicated that they were 'greatly' or 'fully' satisfied.

All three groups gave their lowest level of satisfaction to three items addressing the availability of audio\visual equipment and instructional aids for students doing project work [mean responses (+/- s.d.) to item 6b were 2.61 (1.20) for teachers, 2.74 (1.06) for supervisors, and 2.73 (1.15) for administrators]; students doing team work [mean responses (+/- s.d.) to item 6c were 2.67 (1.24) for teachers, 2.77 (1.05) for supervisors, and 2.80 (1.23) for administrators]; and students doing individual work, both during and outside of the classroom time [mean response (+/- s.d.) to item 6d were 2.45 (1.25) for teachers, 2.47 (1.16) for supervisors, and 2.41 (1.09) for administrators]. Forty to fifty percent of all teachers, supervisors, and administrators reported that the availability of these items were 'seldom' or 'rarely' satisfactory. Administrators also indicated dissatisfaction with the supply of books for both teachers and students [item 2a and 2b: mean responses (+/- s.d.) = 2.75 (.92) and 2.81 (1.06), respectively].

Inspection of the mean response by teachers and supervisors of each subject matter area did not reveal any extreme differences in the overall response to these items.

c. Textbooks (Part II Section D)

Only teachers and supervisors received this portion of the questionnaire. The textbook items assessed (a) the appropriateness of the textbook information to the cognitive levels of the learner, (b) the suitability of the exercises and activities given in the textbook, and (c) the physical appearance of the textbook. Overall, teachers and supervisors reported that they were 'somewhat' to 'greatly' satisfied with these qualities of the textbook [mean responses (+/- s.d.) were 3.53 (+/- . 71) for teachers and 3.37 (+/- .76) for supervisors].

The greatest levels of satisfaction given to textbook items were given to those items that assessed the physical appearance of the textbook (Items 4a - 4g). This was true for both teachers and supervisors for whom the range of mean responses to these item were 4.09 (+/- 1.20) to 3.46 (+/- 1.15) for teachers and 3.91 (+/- 1.09) to 3.48 (+/- 1.03) for supervisors. The specific content of these items along with the mean response (+/- s.d.) given to each item by teachers and supervisors are given below.

Item 4

To what degree is the textbook satisfactory in terms of ...

a: design and layout?

Teachers - 3.88 (1.00)
Supervisors - 3.66 (1.13)

b: binding?

Teachers - 3.98 (1.10)
Supervisors - 3.91 (1.09)

c: type size?

Teachers - 4.09 (1.02)
Supervisors - 3.89 (1.15)

d: size and number of page?

Teachers - 3.80 (1.15)
Supervisors - 3.70 (1.12)

e: number, suitability, usefulness in learning of the illustrations?

Teachers - 3.55 (1.07)
Supervisors - 3.51 (1.03)

f: realistic proportions and comparisons in relations to nature and in relation to other objects?

Teachers - 3.60 (1.02)
Supervisors - 3.48 (1.02)

g: artistic quality and attractiveness of illustrations?

Teachers - 3.46 (1.15)
Supervisors - 3.53 (1.05)

These mean responses indicated that both teachers and supervisors tended to be 'somewhat' to 'greatly' satisfied with the physical characteristics of the textbook.

The lowest levels of satisfaction with the textbook was given to item 1e by both teachers and supervisors. This item asked to what degree the student's textbook helped to develop critical thinking. The mean response given by teachers (3.31 +/-1.06) and supervisors (2.99 +/- .95) indicates that the textbook is viewed by these groups as only 'somewhat' effective in developing critical thinking.

The pattern of responses observed when teachers and supervisors are subdivided by the subject matter that they teach or supervise does not differ greatly from the pattern described above for each group as a whole, with the exception of Islamic Education supervisors. The overall rating of the textbook by Islamic Education supervisors [mean response (+/- s.d.) = 2.03 (.43)] fell way below that of any other supervisor or teacher subgroup.

d. Teacher's Manual (Part II Section E)

Both teachers and supervisors reported that the teacher's manual was, overall, 'somewhat' satisfactory [mean responses (+/- s.d.) of 3.25 (.76) for teachers and 3.18 (.69) for administrators].

Items 4c(i), 4d, and 4f(i) drew the strongest positive responses from teachers, while items 4b and 4c(i) drew the strongest positive responses from supervisors. The content of these items is listed below and, in general terms, assess the teacher's manual's emphasis on course objectives and subject matter. More than 50 percent of all teachers and supervisors reported that they were 'greatly' or 'fully' satisfied with the emphasis of the teacher's manual on the following items.

Item 4 In the teacher's manual, to what degree are...

b: instructional objectives stated?
Supervisors - 3.53 (+/- 1.03]

c(i): educational objectives obvious to the teachers?
Teachers - 3.71 (+/- 1.14)
Supervisors - 3.55 (+/-1.05)

d: instructional objectives related to the subject matter?
Teachers: - 3.61 (+/- 1.05)]

f(i): major learning outcomes cognitive in nature?
Teachers - 3.62 (+/-1.05)]

Supervisors also gave strong support to item 8b(i) that asked to what extent teaching materials and equipment, suggested by the teacher's manual, are easily used by the teachers [mean response 3.50 (+/0 1.05)].

Teachers gave their least positive response to item 8b(ii) that assessed to what extent teachers thought that the teaching materials and equipment suggested by the teacher's manual are easily used by the students [mean response (+/- s.d.) = 2.90 (1.14)]. The qualitative interpretation of the mean response (+/- s.d.) by teachers to this item does not qualitatively differ from the interpretation of the overall mean response by teachers to this portion of the questionnaire. However, more teachers were more likely to report greater dissatisfaction with item 8b(ii) than any other item concerning the teacher's manual.

Supervisors reported that they were least satisfied with the extent to which the teacher's manual encouraged the

development of the instructional process of recognizing various methods to solve problems [mean response (+/- s.d.) to item 11e was 2.83 (+/- 1.05)].

The pattern of responses given by teachers and supervisors of each subject matter area were similar to each other and similar to the pattern of response obtained when these two groups were collapsed across subject matter area. As with other sections of the questionnaire, Islamic Education supervisors were the exception to this statement. Their rating of the teacher's manual [mean response (+/- s.d.) = 2.34 (.54)] fell considerably below the mean response of supervisors as a group. In addition, the mean responses (+/- s.d.) by supervisors in physics was lower than expected [2.60 (.95)]; however, the significance of this is unknown because only three physics supervisors were sampled.

4. Curriculum Content

a. Process of curriculum development (Part II Section A part 1)

Items in this portion of the questionnaire assessed to what extent teachers and supervisors had participated in the decision-making aspects in the development, implementation, and revision of the curriculum content. Overall, the mean response given by teachers and supervisors was similar [mean response (+/- s.d.) of 3.01 (.76) for teachers and 2.95 (.67) for supervisors]. Qualitatively, these mean responses

indicate that teachers and supervisors are 'somewhat' satisfied with the curriculum development process in Oman.

Those items that elicited the most positive responses from teachers and supervisors are listed below by item number. In general, more than 60 percent of all teachers and supervisors indicated (a) teachers and supervisors should participate greatly in the process of curriculum development, (b) both teachers and supervisors have a clear picture of their subject matter in regard to its progression through grades 1 through 12, and (c) both teachers and supervisors have been adequately informed about the curriculum at its implementation.

Item IIA.1 1a: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that teachers should participate in such development? [Mean response (+/- s.d.) = 3.92 (1.40) for teachers and 4.12 (1.33) for supervisors.]

Item IIA.1 1b: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that supervisors (item 1b) should participate in such development? [Mean response = 3.90 (1.25) for teachers and 4.24 (1.32) for supervisors.]

Item IIA.1 5: To what extent do you have a clear picture of the curriculum in your subject matter from grade 1 through 12? [Mean response (+/- s.d.) = 3.91 (1.06) for teachers and 3.83 (1.28) for supervisors.]

Item IIA.1 6c: If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during it development? Specifically, when you were asked to implement it? [Mean response (+/- s.d.) = 3.72 (1.17) for teachers and 3.84 (1.37) for supervisors].

Those curriculum development items that drew the least positive response from teachers and supervisors asked to what extent students (item 4c) and parents (item 4d) had a chance to participate in the curriculum development process. Both teachers and supervisors reported that they thought parents and students had not had a fair chance to participate in the curriculum development [mean response (+/- s.d.) by teachers to item 4c was 2.09 (1.25) and to item 4d was 1.73 (1.11), and by supervisors to item 4c was 2.03 (1.12) and to item 4d was 1.83 (1.22)]. Supervisors and, to a lesser extent, teachers indicated 'various social group' (item 4e) were also not given a fair chance to participate in the curriculum development process [mean response (+/- s.d.) to item 4e by teachers was 2.56 (1.40) and by supervisors was 2.09 (1.32)]. Finally, although teachers indicated that parents were not given a fair chance to participate in the curriculum development process (item 4d), teachers also indicated (item 1e) that parents should 'seldom' participate in the curriculum development process (item 1e) [mean response (+/- s.d.) = 2.22 (1.35)]. Supervisors recommended that parents should at least

'sometimes' participate in the curriculum development process [mean response (+/- s.d.) = 2.81 (1.32)].

Inspection of the mean responses given by teachers and supervisors from each subject matter area did not reveal a large deviation within a specific subject matter area.

b. Curriculum Content (Part II Section A part 2)

Teachers and supervisors responded to a series of items on the specific curriculum content in the subject matter area that they taught or supervised. The items in this portion of the questionnaire assessed the satisfaction of the teachers or supervisors with (a) the choice and sequence of topics, (b) the degree of both horizontal and vertical integration among the various subject matter areas and within the same subject for the different grade levels, and (c) the time allocation for each subject matter. The description of the magnitude and quality of the responses by teachers and supervisors to items on the curriculum content in their subject matter areas will focus on those items that elicited the most and least positive responses and the general level of response to all items covered within a subject matter area. The reader may refer to Appendix B for a more complete report of the levels of satisfaction with the content of their particular curriculum as indicated by the teachers and supervisors.

The questionnaire items on each subject matter area represent collectively at least one dependent variable. Within some subject matter areas, multiple groups of items were isolated and treated as separate dependent variables. The number of dependent variables drawn from each set of subject matter items will be indicated in the discussion below.

i. Islamic Education: The overall response of Islamic Education teachers to questionnaire items on the Islamic Education curriculum content indicated that these teachers were 'somewhat' to 'greatly' satisfied. The least positive response fell to item 10 that asked to what extent the curriculum encouraged students to understand that Islamic Education is not only an organized component of knowledge but a method of thinking and behaving as well [mean response (+/- s.d.) = 2.54 (1.56]. More that 50 percent of the Islamic Education teachers found this concept to be 'seldom' or 'rarely' accomplished. On the other end of the scale, the most positive response by Islamic Education teachers was toward item 17a that asked to what extent the Islamic Education curriculum contributed to the assimilation of the modern intellectual and cultural world [mean response (+/- s.d.) = 3.82 (1.27)]. In response to this statement, more than 50 percent of all Islamic Education teachers reported that they were 'greatly' to 'fully' satisfied with the contribution of the Islamic Education curriculum.

Islamic Education supervisors gave a very different type of response to the Islamic Education curriculum content. The overall response of Islamic Education supervisors to the Islamic Education curriculum content items was negative in nature, indicating that the supervisors were 'seldom' to 'rarely' satisfied with the Islamic Education curriculum content. For example, the greatest level of dissatisfaction was given to items 20a-d. These items are listed below along with the corresponding mean response from the Islamic Education supervisors. Nearly 100 percent of the all Islamic Education supervisors described the concepts outlined in items 20a - 20d as 'seldom' or 'rarely' realized in the Islamic Education curriculum content.

Item	Content
20	To what extent did the Islamic Education Curriculum contribute to the realization of the:
a.	instilling the love of God Almighty in hearts? [Mean response (+/- s.d.) = 1.25 (.45).
b.	instilling love of Prophet Muhammad and following his guidance? [Mean response (+/- s.d.) = 1.25 (.45)].
c.	instilling love for the Prophet's companions and following their guidance? [Mean response (+/- s.d.) = 1.33 (.65)].
d.	instilling pride in Islam? [Mean response (+/- s.d.) = 1.42 (.67)].

The mean response by Islamic Education supervisors to all but 4 items fell below 3.00, emphasizing the extent of dissatisfaction indicated by the Islamic Education

supervisors. The content of those items that did elicit a mean response greater (or equal to) 3.00 are list below along with their respective mean responses (+/- s.d.).

Item	Content
6	To what extent do supervisors participate in the process of developing the Islamic Education Curriculum? [mean response (+/- s.d.) = 3.00 (1.13)].
9	To what extent is there integration, of the Islamic Education curriculum and :
	c. Science curriculum? [mean responses (+/- s.d.) = 3.00 (.85)].
	d. Mathematics curriculum? [mean response (+/- s.d.) = 3.42 (.90)].
	e. English Language curriculum? [mean response (+/- s.d.) = 4.25 (.97)].

The level of dissatisfaction shown by Islamic Education supervisors is unlike the response of any other teachers or supervisors of any other subject matter; however, the level of dissatisfaction shown by Islamic Education supervisors to the Islamic Education curriculum is <u>not</u> unlike the response given by these supervisors to other portions of the questionnaire.

ii. Arabic Language: The overall pattern of response to the Arabic Language curriculum content items by both Arabic Language teachers and supervisors indicated satisfaction with the Arabic Language curriculum content, although supervisors tended to give slightly more positive responses than the teachers. That general satisfaction was indicated by mean responses to Arabic Language curriculum

content items that typically fell between 3.00 ('somewhat satisfied') and 4.00 ('greatly satisfied').

Those items that drew the most positive responses from Arabic Language teachers were directed toward the Arabic Language curriculum on Literary Autobiographies section. These items assessed to what extent Arabic Language teachers perceived the Literary Autobiographies Curricula to draw clear illustrations of two points: (a) the status of the autobiographer among literary contemporaries (items 60a); and (b) the artistic and intellectual characteristics of the autobiographer (item 60b). More than 70 percent of all Arabic Language teachers reported that they found the Literary Autobiographies section to be more than 'greatly' satisfactory in meeting the two requirements [mean responses (+/- s.d.) by teachers to item 60a was 4.08 (.90) and to item 60b was 4.08 (.85)].

Several items in this section drew a strong positive response from supervisors. Those items that drew 80 percent or more of the supervisors to report that they were 'greatly' or 'fully' satisfied with the Arabic Language curriculum content are listed below.

Item	Content
1	To what extent were the educational objectives of the Sultanate taken into consideration when setting the content of the Arabic Language Curriculum for the Secondary School Level? [Mean response (+/- s.d.) = 4.13 (.81)].

3c To what degree are the numbers of weekly hours allocated for teaching Arabic Language at your grade level sufficient for the attainment of objectives at Grade III Secondary? [mean response (+/- s.d.) = 4.13 (.81)].

14c To what extent do the authors of the Arabic Language Curriculum content show clearly the Islamic domain? [Mean response (+/- s.d.) = 4.25 (.86)].

15a To what extent did Arabic Language Curriculum designers consider the post-cultural heritage of the Sultanate of Oman? [Mean response (+/- s.d.) = 4.19 (.75)].

15b To what extent did Arabic Language Curriculum designers consider the modern Omani developments? [Mean response (+/- s.d.) = 4.13 (.96)].

22c To what extent was vertical integration and continuity achieved among curriculum units of Arabic Language in the Grade III Secondary? [Mean response (+/- s.d.) = 4.13 (.62)].

24 To what extent were the readings for Secondary Level classes varied and covering all aspects and domains necessary for student's development: cultural, religious, social, economic aspects, etc.? [Mean response (+/- s.d.) = 4.13 (.81)].

25d To what extent were the following criteria considered in selecting reading topics in Secondary Level classes on inculcation of topics that represent the originality and culture of the past? [Mean response (+/- s.d.) = 4.31 (.70)].

26b To what extent is balance between prose and poetry texts realized in setting content of the curriculum in the Grade II Secondary? [Mean response (+/- s.d.) = 4.25 (.68)].

The least positive response to Arabic Language curriculum content items by teachers was given to item 6a [mean response (+/- s.d.) = 2.69 (1.28)]. This item asked to what extent the Arabic Language curriculum for the Secondary Level encouraged the use of modern educational media. The mean response indicated that teachers found the

Arabic Language curriculum to only 'seldom' to 'sometimes' encourage the use of modern educational media.

Supervisors gave their least positive response to item 19e [mean responses (+/- s.d.) = 3.00 (1.16)] that asked to what extent the supervisors found the reading topics in the Secondary Level Arabic Language classes helpful in developing reading skills by increasing the students' ability to critique and judge reading material. Supervisors indicated that the reading topics were only 'somewhat' helpful in increasing the students' ability to critique and judge reading materials.

iii. English Language: Overall, the mean response to most English Language curriculum content items indicated that both English Language teachers and supervisors found the English Language curriculum 'somewhat' satisfactory. Most English Language curriculum content items drew a mean response around 3.00 ('somewhat' satisfied).

Those aspects of the English Language curriculum that teachers found highly favorable; that is, 70 percent or more, of the English Language teachers indicated that they were 'greatly' or 'fully' satisfied, are listed below.

Item	Content
2b	To what extent are the number of periods delegated for teaching the English Language Curriculum sufficient to realize the desired goals for the second grade level student? [Mean response (+/- s.d.) 3.92 (.97)].
7	To what extent are English Language remedial skill required for Omani secondary students? [Mean response (+/- s.d.) 3.95 (.78)].

Those aspects of the English Language curriculum that supervisors found highly favorable; that is, 70 percent or more, of the English Language supervisors indicated that they were 'greatly' or 'fully' satisfied, are listed below.

Item	Content
18a	To what extent are English Language class cassettes useful to teachers and students in providing good pronunciation models? [Mean response (+/- s.d.) = 3.95 (1.08)].
18b	To what extent are English Language class cassettes useful to teachers and students in promoting and practicing listening comprehension? [Mean response (+/- s.d.) = 3.95 (.97)].

There were no English Language curriculum content items that drew 70 percent, or more, of the English Language teachers toward responses of 'seldom' or 'rare' satisfaction. However, two English Language curriculum content items drew 70 percent, or more, of the English Language supervisors to indicate that they were 'seldom' or 'rarely' satisfied. These items are listed below.

Item	Content
13g	To what extent does the English Language Curriculum content cover specialized vocabulary and topics from a multitude of language domains to enable the student to communicate effectively in respect to the geo-political domain? [Mean response (+/- s.d.) 2.00 (.96)].
19	To what extent are the students encouraged to borrow or make their own copies of the English Language class cassettes so that they may practice on their own at home? [Mean response (+/- s.d.) = 2.00 (.83)].

A large group of English Language curriculum content items (Items 34a through 34w) assessed the extent to which

the English Language curriculum enabled students to master certain skills (e.g. understanding continuous speech, reading a novel in English, etc). The mean responses given to these items by English Language teachers and supervisors fell between 2.00 and 3.00 indicating that teachers and supervisors found the English Language curriculum content 'seldom' to 'sometimes' adequate in promoting mastery of these skills.

Finally, both teachers and supervisors of English Language reported that the secondary level English Language curriculum content prepared students 'somewhat' for life after secondary school, regardless of whether the student intended to (a) attend the Sultan Qaboos University or a university abroad; (b) obtain a job in the Omani national private sector; or (c) obtain a job in the Omani government sector. More than 70 percent of all English Language teachers and supervisors reported that the secondary English Language curriculum 'sometimes,' 'seldom,' or 'rarely' prepared students for life after school in the jobs in the Omani national private or government sectors.

iv. Mathematics: The overall mean response to Mathematics curriculum content items by mathematics teachers and supervisors indicated that both groups were 'somewhat' to 'greatly' satisfied with the Mathematics curriculum content; in that, the mean response to most items fell

between 3.00 and 4.00. Overall, the supervisor response tended to be more positive than the teacher response.

Those aspects of the Mathematics curriculum that teachers found highly favorable; that is, 80 percent or more, of the Mathematics teachers indicated that they were 'greatly' or 'fully' satisfied, are listed below.

Item	Content
	To what degree do you feel that the curriculum teaching plan (8 weekly hours) is appropriate? [Mean response (+/- s.d.) =4.47 (.80)].
39	To what degree do you feel that curriculum-teaching plan for Grade 3 Science Section (8 weekly hours) is sufficient? [Mean response (+/- s.d.) = 4.27 (1.01)].

Those aspects of the Mathematics curriculum that supervisors found highly favorable; that is, 80 percent or more, of the Mathematics supervisors indicated that they were 'greatly' or 'fully' satisfied, are listed below.

Item	Content
2	To what extent are the number of weekly hours allocated for teaching the curriculum sufficient for realizing the desired goals of the Mathematics Curriculum? [Mean response (+/- s.d.) = 3.89 (.33)].
7a	To what degree does the Mathematics Curriculum encourage students to develop the attitudes and habits essential for inductive reasoning? [Mean response (+/- s.d.) = 4.22 (.44)].
7b	To what degree does the Mathematics Curriculum encourage students to develop the attitudes and habits essential for deductive reasoning? [Mean response (+/- s.d.) = 3.89 (1.17)].
8a	To what extent does the Mathematics Curriculum encourage the students to develop the new

attitudes and basic skills necessary for critical thinking like suspending judgement? [Mean response (+/- s.d.) = 3.89 (1.17)].

8b To what extent does the Mathematics Curriculum encourage the students to develop the new attitudes and basic skills necessary for critical thinking like testing the accuracy of data? [Mean response (+/- s.d.) = 3.78 (1.09)].

21 To what extent does the time schedule (6 weekly hours) accommodate the curriculum content of Grade 1 Secondary? [Mean response (+/- s.d.) = 4.33 (.50)].

23 To what extent is there cohesion between units of "correlations and functions" and material previously studied in the Preparatory level? [Mean response (+/- s.d.) = 4.00 (.50)].

31 To what degree do you feel that the curriculum teaching plan (8 weekly hours) is appropriate? [Mean response (+/- s.d.) = 4.67 (.50)].

34 To what extent does the Secondary Mathematics Curriculum succeed in presenting the unit of complex numbers? [Mean response (+/- s.d.) = 4.22 (.44)].

35a To what extent does the geometry part of the Mathematics Curriculum of class II secondary succeed in demonstrating analytic geometry (the circle)? [Mean responses (+/- s.d.) = 4.33 (.50)]

35b To what extent does the geometry part of the Mathematics Curriculum of class II secondary succeed in demonstrating vectors? [Mean responses (+/- s.d.) = 4.11 (.60)]

39 To what degree do you feel that curriculum teaching plan for Grade 3 Science section (8 weekly hours) is sufficient? [Mean responses (+/- s.d.) = 4.50 (1.07)]

40 To what degree do you see that introduction to limits and continuity is appropriate? [Mean response (+/- s.d.) = 3.89 (.93)]

42 To what degree do you see the student has benefited from studying derivatives in differential application? [Mean response (+/- s.d.) = 4.33 (.50)].

44 To what degree do you feel there is logical sequence in topics of the units on differentiation? [Mean response (+/- s.d.) = 4.33 (.50)].

46 To what extent is the unit of conical sections integral to what has been studied in analytic geometry, and geometry of transformations? [Mean response (+/- s.d.) = 4.00 (.50)].

48 To what degree do you feel that the curriculum has achieved objectives of teaching functions topics? [Mean response (+/- s.d.) = 4.22 (.67)].

53a To what degree do you feel that the following exists in the probability curriculum for grade 3 scientific: topic-sequence? [Mean response 4.33 (.88)].

55 To what degree do you feel that probability curriculum is useful to the student in his academic life? [Mean response (+/- s.d.) = 4.33 (.71)].

56 To what degree do you feel that the statistic curriculum is integrative in its topics and in logical sequence? [mean response (+/- s.d.) = 4.33 (.50)].

57c To what extent was the curriculum successful in presenting the statistics unit from the following aspects: dispersion and its measures? [Mean response (+/- s.d.) = 4.11 (.93)].

Mathematics teachers gave their least positive responses to item 65 and item 66. In response to item 65, that asked whether or not linear programing is appropriate to the grade 2 level, 53 percent of the mathematics teachers suggested that it was <u>not</u> appropriate and recommended that it be deleted. Only 35 percent of the mathematics teachers thought that linear programing is appropriate to grade 2. In response to item 6 that asked whether or not enough time was allocated to teaching Mathematics in Grade 3 Arts section, teachers overwhelmingly responded 'no'. Fifty-five

percent of the Mathematics teachers indicated that there was not enough allocated time to teach mathematics in grade 3 Arts section.

v. General Science: The overall response to General Science curriculum content items by teachers and supervisors of the general sciences indicated that they were 'somewhat' to 'greatly' satisfied with the curriculum. The mean response by teachers and supervisors to most General Science curriculum content items fell between 3.00 ('sometimes') and 4.00 ('greatly').

Those items that drew the most positive responses from General Science teachers are listed below. In response to these items, more than 70 percent of the General Science teachers indicated that they were 'greatly' or 'fully' satisfied.

Item	Content
11j	A list of objectives to be achieved are included in the General Science curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives: developing the students' appreciation of the efficiency of the universe as a system and appreciation of the natural beauty that reflects the greatness of the Almighty God? [Mean response (+/- s.d.) = 4.23 (.73)].
13e	To what degree do you feel that the General Science Curriculum for grades 2 and 3 encourages the development of the following affects: appreciation of the role of scientists in general, and Muslim scientists in particular, in the progress of human society? [Mean response (+/- s.d.) = 3.93 (.92)].

In addition, more that 50 percent of all General Science teachers reported that every General Science curriculum unit was appropriate for the cognitive level of their students and class (Item 15).

Finally, General Science teachers overwhelmingly recommended that the curriculum topics in item 16 be removed from their current grade. Item 16 asked specifically to what extent General Science teachers thought that the new curriculum topics should continue to be taught at the current grade level. More than 80 percent of the teachers indicated that these new topics should be deleted from the present grade level and moved either to a higher secondary grade or to the university level, or that the items should be deleted altogether. The topics to which they refer to are listed below.

<u>Grade 2</u>
- stars (characteristics and groups)
- solar system
- internal combustion engine
- diesel engine
- radio
- cathode-ray tube and television

<u>Grade 3</u>
- nuclear energy (nuclear fission and nuclear fusion)
- content of earths atmosphere
- atmospheric humidity and its measurement

General Science supervisor response paralleled that of the General Science teacher. Like General Science teachers, over 50 percent of all General Science supervisors found the General Science curriculum content 'greatly' to 'fully' appropriate to the cognitive level of the students (Item

15), with one exception, unit 3 Grade 2 literary ('Transportation'). Most supervisors indicated that 'transportation' items were only 'somewhat' to 'fully' appropriate to the cognitive level of their students.

More than 75 percent of the general science supervisors, also indicated that the new topics introduced into the Secondary Grade level curriculum should be moved either to a higher grade or to a university, or these items should be deleted altogether.

Finally, several other General Science curriculum content items drew highly positive responses from the General Science supervisors. These items, listed below, drew over 70 percent of the General Science supervisors to give the response 'greatly' or 'fully'.

Item	Content
2	To what extent were weekly hours allocated for teaching the General Science Curriculum sufficient to achieve desired objectives in Omani curriculum? [Mean response (+/- s.d.) = 4.00 (.63)]
11f	A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives: identity danger and hazards of pollution and how they could participate in protecting their environment from these dangers? [Mean responses (+/- s.d.) = 4.17 (.75)].
11h	A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives: learning scientific-method thinking and developing habit of using this method in solving every day problems? [Mean responses (+/- s.d.) = 4.00 (.63)].

No General Science curriculum content item drew particularly weak support from either General Science teachers or supervisors.

vi. History: The overall pattern of response by History teachers and supervisors indicated that they were 'somewhat' to 'greatly' satisfied with the History curriculum content. Typically, the mean response to History curriculum content items fell between 3.0 ('sometimes') and 4.0 ('greatly').

The mean response given to two item, items 3c and item 31, deviated from the typical pattern described above. Item 3c asked to what extent the curriculum on independent learning methods encouraged students to use library references and field research. The mean response (+/- s.d.) [2.92 (1.30)] by History teachers to this item indicated that students either 'sometimes' or 'seldom' used library references or field research as an independent learning method. Item 31 asked to what extent coherence and continuity is achieved between the History Curricula of Grade 3 Secondary and the History Curricula of Grades 1 and 2 Secondary. The mean response given by both History teachers and supervisors indicated that continuity or coherence is achieved 'seldom' or only 'sometimes' [mean responses (+/- s.d.) of 2.80 (1.25) for teachers and 2.75 (1.58) for supervisors]. In fact, more than 50 percent of all History teachers and supervisors indicated that

continuity and coherence between Grade 3 and Grades 1 and 2 of the History curriculum occurred only rarely, seldom, or sometimes.

Those items drawing the most strongly positive responses from History teachers typically drew 80 percent or more of the teachers to the response of 'greatly' (4.0) or 'fully' (5.0). These items are listed below.

Item	Content
1	The spiral curriculum approach has been used in designing the content of the Omani History Curriculum. This means that a group of concepts are treated at the Primary and Secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the History Curriculum has been successful in expanding the scope and depth of concepts at the Secondary Level? [Mean response (+/- s.d.) = 4.09 (.75)].
5b	To what extent are weekly hours allocated for civic Education? [Mean responses (+/- s.d.) = 4.21 (1.14)]. (Contrast this item with items 5a and 5c that asked to what extent <u>enough</u> weekly hours are allocated for History [3.76 (1.39)] and Human Culture [3.30 (1.38)]
10	To what extent did the History Curriculum for Grade 1 help the student perceive time and place relationships and use them as a fundamental core in studying the History of Modern Europe? [Mean response (+/- s.d.) = 4.14 (.86)].
12	To what extent does integration and coherence exist among Grade 1 History topics from European Renaissance to World War II? [Mean response (+/- s.d.) = 4.27 (.87)].

In addition, all items that assessed the Grade 2 Literary curriculum in History were rated as either 'greatly' or 'fully' satisfactory by more than 60 percent of the History

teachers. This pattern was also found in the responses of the History teachers to Grade 3 Literary curriculum content with the following exceptions. In response to the Grade 3 Literary items listed below, more than 20 percent of the History teachers indicated that the History curriculum content in Grade 3 'seldom' or 'rarely' accomplished its goal.

Item	Content
30	To what extent does the Curriculum encourage stimulation of students as in motivation to read and reference original sources for the studying History of Oman and the Arab Gulf? [Mean response (+/- s.d.) = 3.38 (1.29)].
31	as discussed previously on page 51.
32b-e	As a secondary level History teacher, are you convinced that, in order to enrich the content of 3rd grade History, that the following topics related to the History of Oman and the Arab Gulf be included in the curriculum:
	[a. navigation and marine life? 79.5 percent of the History teachers reported that they are 'greatly' or 'fully convinced that this topic should be in the curriculum.]
	b. marine natural phenomena in Muslim Literature? [Mean response (+/- s.d.) = 3.41 (1.57)]
	c. observation and measurement instruments? [Mean response (+/- s.d.) = 3.68 (1.43)].
	d. natural and marine phenomena, such as tide and ebb and marine currents? [Mean response (+/- s.d.) = 3.66 (1.37)].
	e. particular properties of herbs and wind? [Mean Response (+/- s.d.) = 3.60 (1.47)].
34	To what extent are instructional materials related to the curriculum sufficient to clarify concepts and perceptions of time and place dimensions in

order to comprehend the History of this region? [Mean response (+/- s.d.) = 3.44 (1.04)].

37a-c To what extent was the curriculum successful in training students in the following:

a. chairing an open discussion? [Mean response (+/- s.d.) = 3.61 (1.07)].

b. performing research? [Mean response (+/- s.d.) = 3.26 (1.26)].

c. writing reports? [Mean response (+/- s.d.) = 3.23 (1.32)].

[d. using the school textbook as an important learning source? 83.6 percent of the History teachers indicated that student training with school textbooks is 'greatly' or 'fully' successful].

The response pattern of History supervisors was very similar to that of History teachers. Those items drawing the most positive response, typically drawing more than 80 percent of all History supervisors to the response of 'greatly' (4.0) or 'fully' (5.0), are listed below.

Item	Content
5a,b	To what extent are weekly hours allocated for the following courses sufficient:

a. History? [Mean response (+/- s.d.) = 4.13 (.99)].

b. Civic Education? [Mean response (+/- s.d.) = 4.25 (.71)].

[c. Human Culture? Only 62.5 percent of the History supervisors indicated that there was sufficient time.]

The responses of the History supervisors to Grade 2 and Grade 3 Literary curriculum content, like the responses of History teachers, indicated that supervisors were 'greatly' to 'fully' satisfied. In all but a few cases, the most

common response was either 4.0 ('greatly') or 5.0 ('fully'). Those cases that did not fit this pattern are listed below.

Item	Content
30	To what extent does the Curriculum encourage stimulation of students as in motivation to read and reference original sources for studying History of Oman and the Arab Gulf? [Mean response (+/- s.d.) = 3.50 (.76)]. Sixty-two percent of the History supervisors indicated that this was 'sometimes' accomplished.
31	as discussed previously on page 51.
37b,c	To what extent was the curriculum successful in training students in the following: [a. chairing an open discussion? [Mean response (+/- s.d.) = 3.63 (.92)]. Fifty percent of the History supervisors indicate that this training is 'greatly' successful.] b. performing research? [Mean response (+/- s.d.) = 3.25 (.89)]. Sixty-two percent of the History supervisors indicate that this training is only 'sometimes' successful. c. writing reports? [Mean response (+/- s.d.) = 3.00 (.93)]. Sixty-two percent of the History supervisors indicate that this training is only 'sometimes' successful. [d. using the school textbook as an important learning source? Fifty percent of the History supervisors indicated that this training is 'greatly' successful.]

vii. Geography and Contemporary Problems: Geography teachers and supervisors had somewhat different qualitative responses to Geography curriculum content items. Teachers reported greater satisfaction with the Geography curriculum content than supervisors reported. Overall, the mean responses to Geography curriculum content items by teachers fell between 3.0 ('sometimes') and 5.0 ('fully'); and the

responses by supervisors most often fell between 2.0 ('seldom') and 4.0 ('greatly').

Those Geography items drawing the most positive responses typically drew 80 percent or more of the Geography teachers to respond by indicating that they either 'greatly' (4.0) or 'fully' (5.0) agreed or supported the concept or objective outlined by the item. These items are listed below.

Item	Content
1	The spiral curriculum approach has been used in designing the content of the Omani Geography and Contemporary Problems Curriculum. This means that a group of concepts are treated at the Primary and Secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Geography and Contemporary Problems Curriculum has been successful in expanding the scope and depth of concepts at the Secondary Level? [Mean response (+/- s.d.) = 4.14 (.70)].
5b	To what extent are the hourly periods allocated to Civic Education sufficient? [Mean response (+/- s.d.) = 4.34 (.77)]. (Contrast this with the responses given to items 5a and 5c that ask to what extent enough time is allocated to Geography [item 5a = 3.36 (1.36)] and human culture [item 5c = 3.25 (1.42)]. Fifty percent, or less, of the Geography teachers indicated that enough time was available for these two other courses.)
27a	To what extent was the curriculum (Grade 2 Art section) successful in explaining the meaning of "applied geography" and its application? [Mean response (+/- s.d. = 4.25 (.91)].
28	To what extent was the curriculum (Grade 2 Art section) successful in illustrating types of transportation and its role in development and enhancement of trade exchange internally and externally? [Mean response (+/- s.d.) = 4.27 (.81)].

29 To what extent was the curriculum successful in illustrating concepts relating to oil and in educating students to all issues relative to economic, social, and political effects? [Mean response (+/- s.d.) = 4.32 (.81)].

35a-f To what extent was the curriculum (relative to Grade 3 Art section) successful in:

a. identifying and interpreting the position of Omani direction? [Mean response (+/- s.d.) = 4.45 (.81)].

b. describing, analyzing, and rationalizing the natural topography of the Sultanate? [Mean response (+/- s.d.) = 4.41 (.85)].

c. division of the Sultanate into its geographical regions? [Mean response (+/- s.d.) = 4.29 (.81)].

d. familiarizing students with agricultural production and facilities in the Sultanate? [Mean responses (+/- s.d.) = 4.41 ().72)].

e. knowing the establishment and development of industry in the Sultanate? [Mean response (+/- s.d.) = 4.29 (.79)].

f. explaining the state's specific philosophy in service presentation to citizens throughout the Sultanate? [Mean response (+/- s.d.) = 4.31 (.95)].

36a-e To what extent did the content (Grade 3 Art section) contribute to illustrating the following:

a. general features of the Arabian Gulf region? [Mean response (+/- s.d.) = 4.25 (1.06)].

b. interpretation of the weather conditions in the Arabian Gulf region? [Mean response (+/- s.d.) = 4.43 (.87)].

c. explanation of water resources and forming positive attitudes to dealing with them in the Arabian Gulf region? [Mean response (+/- s.d.) = 4.18 (.97)].

d. specification of population characteristics in the Arabian Gulf and past and present transformations of Gulf States? [Mean response (+/- s.d.) = 4.30 (.91)].

e. economic factors that impact the Arabian Gulf region? [Mean response (+/- s.d.) = 4.23 (.87)].

38a,b A number of universal contemporary problems were included in the curriculum structure, but omitted in how these problems relate to existing conditions in Oman and the Gulf States. To what degree do you see that the follow-up current events were:

a. interesting and exciting from the students' point of view to follow-up? [Mean response (+/- s.d.) = 4.22 (.97)].

b. useful in students' acquisition of the ability to distinguish valuable from non-valuable flood of information in mass media? [Mean response (+/- s.d.) = 4.17 (.79)].

[c. helpful for students to perceive time and place relationships? Mean response (+/- s.d.) = 3.96 (1.11). Sixty-six percent of the Geography teachers indicated that they were 'greatly' to 'fully' helpful.]

[d. enlightening students to the extent of interaction between Omani environment and other environments? Mean response (+/- s.d.) = 4.00] (.88). Seventy-three percent of the Geography teachers indicated they were 'greatly' to 'fully' enlightening.]

39a,b A number of contemporary problems were included in the curricula for Grade 2 and 3 Scientific content. To what extent does the curriculum content:

a. illustrate these problems? [Mean response (+/- s.d.) = 4.28 (.72)].

b. show the negative aspects of these problems? [Mean response (+/- s.d.) = 4.06 (.88)].

[c. motivate students to adopt positive opinions and ideas toward them? Mean response (+/- s.d.) = 3.94 (.99). Seventy-three percent of the Geography teachers indicated that this was 'greatly' or 'fully' true.]

In response to items that specifically addressed Grade 2 and 3 Geography and Contemporary Problems, Geography

teachers gave highly positive mean responses. Typically more than 70 % of the teachers indicated that they were 'greatly' to 'fully' satisfied with the specific curriculum content in Geography and Contemporary Problems.

Geography supervisors, as mentioned earlier, reported far less satisfaction with the Geography and Contemporary Problems curriculum than teachers reported. However, those items that drew the most positive responses typically drew 70 percent, or more, of the Geography supervisors to report that they were 'greatly' to 'fully' satisfied with the Geography curriculum. These items are listed below:

Item	Content
1	The spiral curriculum approach has been used in designing the content of the Omani Geography and Contemporary Problems Curriculum. This means that a group of concepts are treated at the Primary and Secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Geography and contemporary Problems Curriculum has been successful in expanding the scope and depth of concepts at the Secondary Level? [Mean response (+/- s.d.) = 3.86 (.69)].
5a,b	To what extent are the hourly periods allocated to each of the following subject matters sufficient: a. Geography? [Mean response (+/- s.d.) = 4.67 (.52)]. b. Civic Education? [Mean response (+/- s.d.) = 4.67 (.52) [c. Human Culture? Mean response (+/- s.d.) = 3.29 (1.70). Fifty-seven percent of the supervisors reported that sufficient time was usually available.]

13 To what extent did the curriculum avoid topics beyond the intellect and perception of students? [Mean response (+/- s.d.) = 3.43 (.98)].

15 To what extent was integration among Geography and Contemporary Problems curricula in Grades 1,2, and 3 literary realized? [Mean response (+/- s.d.) = 3.57 (.79)].

In addition, like the Geography teachers, more than 50 percent of the Geography supervisors reported that they were 'greatly' to 'fully' satisfied with almost all of the specific curriculum content in Geography and Contemporary Problems.

Unusually negative responses from Geography supervisors were found toward items 3c and 3d. These two items addressed the development of independent learning approaches by students, specifically their use of library and field research (item 3c) and data collection by scientific means (item 3d). A majority of Geography supervisors indicated that the development of these techniques by students occurred either 'seldom' or 'rarely'.

viii. Civic Education: The responses of the Civic Education teachers to the Civic Education curriculum content were positive in that the mean response by teachers to these items fell between 3.0 ('sometimes') and 5.0 ('fully'), thereby, indicating qualitatively that teachers were greatly satisfied with the Civic Education curriculum. Supervisors of Civic Education, on the other hand, most frequently indicated that the curriculum was only 'sometimes' satisfactory.

Listed below are the items that drew the greatest responses from Civic Education teachers. Typically, these items drew more than 80 percent of the Civic Education teachers toward responses of 4.0 ('greatly') or 5.0 ('fully'). This demonstrated that the Civic Education teachers were 'greatly' or 'fully' satisfied with that aspect of the curriculum outlined by the item.

Item	Content
1	The spiral curriculum approach has been used in designing the content of the Omani Civic Education Curriculum. This means that a group of concepts are treated at the Primary and Secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Civic Education Curriculum has been successful in expanding the scope and depth of concepts at the Secondary Level? [Mean response (+/- s.d.) = 4.13 (.78)].
5a	To what extent are the weekly hours allocated for Civic Education sufficient? [Mean response (+/- s.d.) = 4.20 (1.20).] (Contrast this response with the responses to items 5b and 5c that ask if enough time is available for Human Culture [item 5b = 3.03 (1.61) and History [item 5c = 3.71 (1.40)].)

In addition, highly positive responses were given to items on the success of the Omani curriculum in teaching about the Omani society, Arab Society, and the present Muslim world. Typically, nearly 90 percent of all Civic Education teachers indicated that they thought the Civic Education curriculum was 'greatly' or 'fully' successful in educating the Secondary Level students on these topics.

The least positive response given to the Civic Education curriculum items by Civic Education teachers fell to item 3c that asked to what extent students learned to use library references and/or to use field research during independent learning. Forty-two percent of the Civic Education teachers reported that students 'seldom' or 'rarely' used library references and/or field research during independent learning [Mean response (+/- s.d.) = 2.97 (1.39)].

Listed below are the items that drew the most positive responses from the Civic Education supervisors. Sixty to eighty percent of the supervisors gave the response of 4.0 ('greatly') or 5.0 ('fully').

Item	Content
5a-c	To what extent are the weekly hours allocated for each of the following courses sufficient:
	a. Civic Education? [Mean response (+/- s.d.) = 4.17 (1.17)].
	b. Human Culture? [Mean response (+/- s.d.) = 3.50 (1.64)].
	c. History? [Mean response (+/- s.d.) = 4.17 (1.17)].

In addition, the responses of the supervisors to items addressing the success of the Civic Education curriculum in teaching about the Omani society, Arab society, and the present Muslim world tended to range from 3.0 to 5.0, indicating that supervisors found the content of this part

of the Civic Education curriculum 'sometimes' to 'fully' achieved its objectives.

The responses of the supervisors to several Civic Education items were not favorable. Fifty percent or more, of the supervisors indicated that curriculum content outlined by the items was 'seldom' or 'rarely' satisfactory. This pattern of response was evident in the supervisors' responses to items 3c, 3d and 6c. Items 3c and 3d asked to what extent students used library references, field research, and scientific data collection during independent learning exercises. Item 6c asked to what extent the three curricula, Civic Education, Human Culture, and History, fostered applying knowledge to everyday life situations.

ix. Chemistry: The Chemistry curriculum content questionnaire was subdivided by grade level and within each grade level, curriculum content questionnaire items were organized by topic units. The discussion of the Chemistry curriculum content will focus (a) on general Chemistry curriculum content items that precede curriculum content items on each grade level, and (b) on the specific curriculum content items by grade level.

The mean responses given to general Chemistry curriculum content items by Chemistry teachers fell around 3.00 and indicated that Chemistry teachers were only 'somewhat' satisfied with the general aspects of the Chemistry curriculum. This included aspects of the

Chemistry curriculum, such as (a) the availability of resources for and use of experimentation to teach Chemistry, (b) the level of success in student achievement of the basic knowledge of scientific concepts, and (c) the development of the students' basic scientific attitude. Those few general Chemistry items that drew a more positive response from Chemistry teachers included items 3h, 4c, 5b, and 6e1. In response to these four items, 75 percent to 80 percent of the Chemistry teachers reported that they were 'greatly' or 'fully' satisfied with the content of the items as listed below.

Item	Content
3h	A list of objectives are included in the Secondary Chemistry Curriculum. To what degree do you feel that the curriculum content succeeded in ensuring the belief in the Almighty Creator through studying His Laws in creation that show His Ability, Creativeness, Control, Neatness, Coherence, and Beauty? [Mean responses (+/- s.d.) = 4.27 (.87)].
4c	Some concepts are repeated in Physics and Chemistry. To what extent do you agree with the necessity of repeating the study of radioactivity? [Mean response (+/- s.d.) = 3.92 (1.10)].
5b	Chemistry Curriculum uses measuring units from different systems of units. To what degree do you see the following uses are necessary: limit the uses to the employment of SI units? [mean response (+/- s.d.) = 4.08 (1.15)]. Contrast this response with the response to item 5a that assessed to what degree teachers thought the use of a variety of systems of units was necessary [mean responses (+/- s.d.) = 2.65 (1.12)].
6e1	You have Applied Chemistry curriculum at the Secondary level. To what extent do you agree on the soundness of the curriculum in teaching basic Chemistry concepts in a hierarchical order of

classes, for example, teaching the development of the atomic model? [Mean response (+/- s.d.) = 3.94 (.83)].

The mean responses to Chemistry items addressing the specific curriculum content in Grade 1 (units 1 through 7) indicated that Chemistry teachers were 'sometimes' to 'greatly' satisfied with the specific Chemistry content in Grade 1, because most responses fell to either the response category 3 ('sometimes') or 4 ('greatly').

The mean responses to Chemistry items addressing the specific curriculum content in Grade 2 (units 1 through 6) differed slightly as a function of the unit.

The mean responses to the following items in Unit 1, electromagnetic spectrum, photons, Balmer series, suggested that Chemistry teachers thought that the topics in this Unit need more detail. In response to items on Unit 2, 50 percent, or more, of the Chemistry teachers indicated that topics of Unit 2 should be moved to the 3rd grade. The topics to be moved include (a) double and triple bonds in Organic compounds, (b) representation of ethylene, acetylene, ethylene dimer, (c) hybridization and geometric forms of molecules, and (d) isomerism and geometrical molecular structure. Finally, in response to Units 3, 4, 5, and 6 in the second grade , Chemistry teachers indicated that the topics about heat formation and heat reaction, the application of Le Chateliers' principle, and the chemical calculation using the mole methods were all appropriate. Approximately 80 percent of the teachers indicated that

these latter concepts were 'greatly' or 'fully' appropriate to the Chemistry curriculum in the second grade. However, Chemistry teachers were only 'somewhat' satisfied with the experience and opportunities that the Chemistry curriculum provides the students to carry out appropriate experiments [mean response (+/- s.d.) = 3.06 (1.22)] or to practice writing chemical equations [mean response (+/- s.d.) = 2.98 (1.18)]. They were only 'somewhat' satisfied with the degree of emphasis on the relationship of Chemistry to economic activities and the natural resources of Oman [mean response (+/- s.d.) = 2.69 (1.05)].

The mean responses given to Chemistry items addressing the specific curriculum content in Grade 3 (units 1 through 7) also differed slightly as a function of the unit under consideration. The responses of the Chemistry teachers to Units 1 and 2 in Grade 3 were very positive. Fifty percent to 80 percent of the Chemistry teachers reported that they were 'greatly' or 'fully' satisfied with acid, base, oxidation, and reduction curriculum. The responses to Unit 3 items indicated that Chemistry teachers were only 'somewhat' satisfied with the content of this Unit [unit 3 item 1: mean response (+/- s.d.) = 3.13 (1.41)]. Chemistry teachers strongly agreed with the statement that the organic compound lessons should be started in Grade 2 [Unit 3 item 2: mean response (+/- s.d.) = 4.10 (1.28)] and agreed that the present instruction on the physical characteristics of

organic compounds (Unit 3 item 3) and the basic elements of organic compounds (Unit 3 item 4) are inadequate and that more instructional detail should be added [mean responses (+/- s.d.) were 3.92 (1.09) and 3.74 (1.12) respectively].

The items on Grade 3 Unit 4, Biochemistry, assessed the extent of support for the addition of three new topics to the curriculum. The topics are: hydrolysis of starch, effects of saturated fats on human health and the notation used in describing the synthesis and benefits of hormones and vitamins. The same items were used to measure the support for the deletion of some curriculum units also. The three units measured for possible deletion are: complicated structural formulae of starch and cellulose, complicated formulae of vitamins and the complicated formulae of industrial detergents. The majority of the Chemistry teachers indicated that the latter two topics should be deleted. More that 55 percent of the teachers 'fully' agreed to delete the topics. The overall pattern of response to the addition of three new topics was variable. Most Chemistry teachers, however, indicated that they might favor the addition. Approximately 70 percent of the Chemistry teachers indicated that they 'somewhat', to a great extent, or 'fully' agreed that these new topics should be added.

Items addressing Units 5 and 6 of Grade 3 (the Periodic Table) asked to what extent the Chemistry teachers agreed with a series of statements. Eighty percent or more of the

Chemistry teachers 'fully' or 'greatly' agreed with most of the items and over 65 percent of the Chemistry teachers 'fully' or 'greatly' agreed with every item.

In essence, the Chemistry teachers responses to the Unit 5 and 6 items recommended the following:

1. Factors affecting the chemical activity of elements should be moved from grade 2 to grade 3 (outcome of item 1).
2. The characteristics of one element within the group or small number of the elements within the period should be emphasized after studying the general characteristics (outcome of item 2).
3. More detail should be given to extraction of known metals from their ores and desalination of sea-water and treatment of hard-water (outcome of item 3).
4. More attention should be given to the detection and identification of normal common basic and acidic ions (outcome of item 4).
5. More attention should be given to the differentiation of complex ions and double salts (outcome item 5).

In response to two item addressing Unit 7 on radioactivity in grade 3 Chemistry, Chemistry teachers, by greater than 80 percent, strongly supported the use of SI units instead of c.g.s. units, and, by greater than 70 percent, they strongly supported the addition of three curriculum topics: hazards of radioactive radiations, critical and permissible doses, and protection from radiation.

The responses of Chemistry supervisors to the Chemistry curriculum content items were similar to the responses of the Chemistry teachers. The mean responses to the general Chemistry curriculum content items fell around 3.00;

thereby, this indicated that the Chemistry supervisors were 'somewhat' satisfied with the Chemistry curriculum. Among the general Chemistry curriculum content items, those items that received the most positive responses drew at least 75 percent of all Chemistry supervisors to report that they were 'greatly' or 'fully' satisfied with that aspect of the general Chemistry curriculum. Those items that drew this type of response are listed below.

Item	Content
5b	Chemistry Curriculum uses measuring units from different systems of units. To what degree do you see the following uses are necessary: limiting the use to SI units? [Mean response (+/- s.d.) = 4.50 (.55)]. The supervisors response to this item should be contrasted to their response to item 5a that asked whether a variety of systems of units should continue to be used [mean response (+/- s.d.) = 2.33 (1.03)].
6	You have applied Chemistry at the Secondary level. To what extent do you agree on the soundness of the following statements?
	b. The Chemistry curriculum content is appropriate to the intellectual level of the average student? [Mean response (+/- s.d.) = 4.00 (.63)].
	e1. The Chemistry curriculum teaches basic Chemistry concepts in a hierarchical order of classes including the development of atomic model? [Mean response (+/- s.d.) = 3.83 (.41)].
	e3. The Chemistry curriculum teaches basic Chemistry concepts in a hierarchical order of classes including quantitative chemical calculations? [Mean response (+/- s.d.) = 3.83 (.75)].
	e4. The Chemistry curriculum teaches basic Chemistry concepts in a hierarchical order of classes including periodicity in elements characteristics? [Mean response (+/- s.d.) = 4.00 (.63)].

e5. The Chemistry curriculum teaches basic Chemistry concepts in a hierarchical order of classes including chemical equation as an expression of reaction and its dynamics? [Mean response (+/- s.d.) = 3.83 (.75)].

Supervisor response to the specific curriculum content items for each grade differed as a function of the grade under consideration. In response to Grade 1 items (Units 1 through 7), supervisors typically indicated the curriculum content was appropriate to the Grade level and/or satisfactory in its nature. In response to Grade 2 items (Units 1 through 6), the responses of the Chemistry supervisors differed as a function of the Unit under consideration.

In response to Grade 2 Unit 1 items, Chemistry supervisors, in contrast to Chemistry teachers, reported that topics, such as electromagnetic spectrum, photons, and the Balmer series do not require more detail. The responses of the Chemistry supervisors to Unit 2 items indicated that they did not strongly favor a move to Grade 3 for the following topics: double and triple bonds in organic compounds; application of the use of ethylene, acetylene, and ethylene dimer; hybridization and geometric forms of molecules; and isomerism and geometrical molecular structure.

In response to items on Grade 2, Units 3 through 6, 100 percent of the Chemistry supervisors indicated that the concepts of heat of formation and heat of reaction (Item

a.1), application of Le Chatelier principle (Items a.2), and use of the Mole method for chemical calculations (Item a.3) were 'greatly' or 'fully' appropriate to Grade 2. In contrast, most Chemistry supervisors reported that the Grade 2 Chemistry curriculum did not sufficiently provide the students with an opportunity to carry out appropriate experiments (Item b.1) or write out chemical equations (Item b.2), and did not sufficiently emphasize the relationship between Chemistry and the economic activities and natural resources of Oman (Item b3).

Finally, the overall pattern of responses by Chemistry supervisors to Grade 3 items did not differ qualitatively or quantitatively with the pattern of responses given by Chemistry teachers and, in essence it may be summarized by the following statements.

1. The content of units 1 and 2 are 'greatly' or 'fully' sound (outcome of items 1 - 5 Units 1 and 2).
2. The content of Unit 3 is only 'somewhat' satisfactory and needs either greater detail of the current topics or the addition (and consequent reorganization) of new topics (outcome of Unit 3 items 1 - 4).
3. The topics of hydro-analysis of starch, effect of saturated fats on mans health, and the notation on synthesizing of hormones and vitamins, and their benefit should be added to the Unit 4 curriculum (outcome of items a1 - a3 Unit 4).
4. The use of complicated structural formulae for starch, cellulose, vitamins, and industrial detergents should be deleted (outcome of items b1 and b2 Unit 4).
5. Factors affecting the chemical activity of elements should be moved from grade 2 to grade 3 (outcome of item 1 under unit 5 and 6).

6. The characteristics of one element the group or small number of the elements within the period should be emphasized after studying the general characteristics (outcome of item 2).
7. More detail should be given to extraction of known metals from their ores and desalination of sea-water and treatment of hard-water (outcome of item 3).
8. More attention should be given to the detection and identification of normal common basic and acidic ions (outcome of item 4).
9. More attention should be given to the differentiation of complex ions and double salts (outcome item 5).
10. SI units and <u>not</u> c.g.s. units should be employ in the discussion of radioactivity in Unit 7 (outcome of Unit 7 item 1)
11. The following topics should be added to Unit 7 (item 2 Unit 7): hazards of radioactive radiation; critical and permissible doses of radiation; and protection from radiation.

x. Physics: The Physics curriculum content questionnaire was subdivided by grade and within grade levels by units. The mean responses given to general Physics curriculum items by Physics teachers fell between 3.00 and 4.00, indicating that Physics teachers were 'somewhat' to 'greatly' satisfied with the general aspects of the Physics curriculum. This includes, for example, the hours available for teaching Physics, the continuity of the Physics curriculum in the 3 Secondary grade levels, the successful achievement of a long list of general objectives, such as providing the student with a scientific and functional knowledge of science and technology, and the organization of the Physics curriculum, etc. Several items drew more than 80 percent of the Physics teachers to give a response that indicated that they 'fully' or 'greatly' agreed with the item. These items listed below by item

number are drawn from the general Physics curriculum content items.

Item	Content
2b	To what extent are the number of weekly hours allocated for teaching Physics curriculum sufficient to achieve the objectives of the curriculum namely, theoretical knowledge and experimental skills, for Grade 2 (4 weekly hours)? [Mean response (+/- s.d.) = 4.25 (1.00)]. This is in contrast to the responses to the same questions for item 2a for grade 1 [3.43 (1.25)] and for item 2c for grades 3 [3.80 (1.22)].
11b3	To what degree do you feel, as a result of the implementation of the curriculum, that it has succeeded in realizing the acquisition of this skill: expressing physics relationships in mathematical forms and application of theories and laws in solving problems in Physics? [Mean response (+/- s.d.) = 4.07 (1.11)].

The mean responses to Physics items addressing the specific curriculum in Grade 1 (units 1 through 3) indicated that Physics teachers were satisfied, because most responses fell to either the response category 3 ('sometimes') or 4 ('greatly'). One exception to this pattern was found in regard to item 3 in Grade 1, Unit 3 'Liquids'. This item asked to what extent laboratory experiments supporting the concepts under 'liquids' were sufficient [Mean response (+/- s.d.) = 3.09 (1.01)]. Most Physics teachers indicated that laboratory experiments on 'liquids' were 'rarely', 'seldom', or only 'sometime' sufficient.

The mean responses to Physics curriculum content items addressing the specific curriculum in Grade 2 for units 1 through 3 indicated, again, that Physics teachers were near

'greatly' satisfied with grade 2 curriculum content. As is the case in the Grade 1 Physics curriculum, the availability of laboratory or practical experiments was the exception to the rule. Most Physics teachers indicated that laboratory experiments on 'laws of conservation of mass and energy,' 'heat and thermodynamics,' and 'wave nature' were 'rarely', 'seldom', or only 'sometime' satisfactory.

The mean responses to Physics items addressing the specific curriculum in Grade 3 for Units 1 through 3 indicated that Physics teachers were near 'greatly' satisfied with the curriculum in Grade 3 , although, as was true for grades 1 and 2, they were only 'somewhat' satisfied with the extent of laboratory and practical experiments at this grade level.

Only a small number (n = 3) of Physics supervisors were available to be sampled. Consequently, detailed description will not be given because the percent scores and mean response scores to each item contain a high degree of variability thus diminishing the reliability of any results.

xi. Biology: The Biology curriculum content questionnaire, like the Chemistry and Physics curriculum content questionnaires, was subdivided by grade level and still further by units within a grade level. Most mean responses to general Biology curriculum content items by Biology teachers fell between 3.0 and 4.0 indicating that Biology teachers were 'somewhat' to 'greatly' satisfied with

the general aspects of the Biology curriculum. For example, the hours available for teaching Biology; the continuity of Biology curriculum in the three secondary grade levels; the success in achieving a list of general objectives, such as providing the student with scientific and functional knowledge of science and technology; the organization of the Biology curriculum; and extent to which the Omani Biology curriculum contributes to the familiarization of students with the natural resources in their environment. One item drew more than 80 percent of the Biology teachers to the responses of 'fully' or 'greatly'. This item (Item 16) asked to what extent studying the Omani Biology Curriculum will illuminate the mystery of creation and the universe and develop man's appreciation of The Creator's Absolute Greatness in this universe's creation and organization, and the protection of the natural balance of the planet earth? [Mean response (+/- s.d.) = 4.18 (.84)]. Biology teachers indicated the Biology curriculum does indeed illuminate this concept.

Items on the specific curriculum of each grade were used to assess the degree to which teachers found the curriculum successful in helping students construct function-oriented concepts so that they were able to make generalizations (Items under 20). Biology teachers indicated that the instruction of the curriculum in Grades 1, 2, and 3 for units 1 through 6 successfully meets this

requirement with more than 50 percent of the Biology teachers reporting that they were 'fully' or 'greatly' satisfied with the success of the curriculum in developing function-orientated concepts for the students to learn. One exception to the favorable pattern of responses to curriculum content items was found in the response of the Biology teachers to the instruction of geological eras in Grade 1. The mean response to this item indicated that it did not help students construct a function-oriented concept [Mean response (+/- s.d.) = 2.83 (1.14)].

While the Biology teachers' responses toward the specific Biology curriculum content indicated that they were greatly satisfied, their response to curriculum items on the availability of apparatus and/or living organisms for more practical application of the Biology information indicated that they were only 'somewhat' satisfied [mean response (+/- s.d.) to item 27 = 3.02 (+/- 1.15). In fact, 30 to 40 percent indicated that these supplies were 'rarely' or 'seldom' available.

Only a small number of supervisors of Biology (n = 4) were available to be sampled consequently, a more detailed description will not be given because the percent scores and mean response score to each item contains a high degree of variability, thus diminishing the reliability of these measures.

xii. Human Culture: The mean responses to Human Culture items by Human Culture teachers typically fell between 3.00 ('sometimes') and 4.00 ('greatly'), thereby indicating that Human Culture teachers were satisfied and sometimes 'greatly' satisfied with the Human Culture curriculum content. In fact, only one item drew a mean response less than 3.00. Item 5b assessed to what extent teachers of Human Cultures thought enough time was allocated for teaching Civic Education [Mean response (+/- s.d.) = 2.53 (1.50)]. In response to this item, 46 percent of the Human Culture teachers indicated that there was 'rarely' or 'seldom' enough time allocated for Civic Education. In contrast, more than 60 percent of the Human Culture teachers thought that there was enough time was allocated for teaching History and Human culture [Mean responses (+/- s.d.) were 3.65 (1.52) and 3.72 (1.37) respectively].

Items 16 and 17 assessed the success of the objectives put forth for the Human Culture curriculum in Grades 2 and 3. The mean response to these items fell around 4.00 thereby indicating that Human Culture teachers thought that the objectives were successful to a 'great extent'.

Too few supervisors (n = 3) were available to be sampled to provide even a brief description of their response pattern.

B. Students

Two groups of students were sampled. One-half of the number of students in each group specialized in the Arts and one-half of the number in each group specialized in the Sciences. One group responded to a questionnaire that assessed (a) curriculum content of each subject matter, (b) method of teaching and evaluation, and (c) facilities. The other group responded to another questionnaire that assessed the textbooks used at the secondary level.

The questionnaires to assess the curriculum content, method of teaching and evaluation, and facilities were parallel in content except for the subject matter items. Together the bulk of the questionnaire given to students paralleled in content much of the questionnaire given to teachers, supervisors, and administrators. The general content and the source (questionnaire part and section) of the items given to the students are listed below and are followed by a brief description of the type and magnitude of responses given to these items.

<u>Questionnaire given to Group 1</u>:

Part II Section 1 (part A): General Curriculum content

Part II Section 1 (part B): Subject matters content[2]
Islamic Education;

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2 Students of the arts and Students of the sciences responded to only those items that assessed courses that they had taken. Items on subject matters taken by both groups of students were not identical in all cases but did overlap. Instead, items given to Arts and Science students tended to focus on concepts applicable to the specific Arts and Sciences program.

Arabic Language;
English Language;
Mathematics;
General Sciences;
History;
Geography and Contemporary Problems;
Civic Education;
Chemistry;
Physics;
Biology;
Human Cultures

Part II Section 2: Methods of Teaching

Part II Section 3: Materials and Facilities

Part II Section 4: Evaluation of Performance

Questionnaire given to Group 2:

Part II (part A): Textbooks in subject matters common to both the Arts and Science curriculum
- Islamic Education
- Arabic Language
- English Language

Part II (part B Arts): Textbooks in the Arts curriculum
- History of Arabic Literature
- Social Studies
- General Sciences
- Mathematics

Part II (part B Sciences): Textbooks in the Science curriculum
- Chemistry
- Physics
- Biology
- Mathematics
- Human Cultures

1. General Curriculum Content

Both students of the Arts and students of the Sciences responded to an identical set of questionnaire items that asked them to what extent they were satisfied with their curriculum, specifically to what extent the they thought

that they were benefiting cognitively, socially, and emotionally from their secondary level education. The mean responses by students of the Arts indicated that they were 'somewhat' to 'greatly' satisfied with or benefiting from their curriculum; the most common mean response to these items fell between 3.00 and 4.00. Science students gave qualitatively, a slightly less positive response overall with the most common mean response around 3.00. The qualitative interpretation of the response of Science students response is that they were 'somewhat' satisfied with, or benefiting from, their curriculum.

Those items that drew the most strongly positive response were similar for both Arts and Science students and are listed below along with the mean response (+/- s.d.) given by each student group. In response to these items, more than 70 percent of the Arts and Science students indicated that they thought the content outlined by the item had been 'greatly' or 'fully' achieved.

Item	Content
3a	To what degree do subject-matters at the Secondary Level help you acquire cognitive skills? [Mean response (+/- s.d.) was 3.92 (.92) and 4.06 (1.00) for Arts and Science students, respectively].
10	To what extent does your Secondary school education contribute to opening your sense of self-respect, loyalty to country, and to all Arab homeland? [Mean response (+/- s.d.) was 4.57 (.78) and 4.46 (.88) for Arts and Science students, respectively].
11	To what extent does this level of study develop in you a positive attitude toward environmental

protection and natural resource conservation? [Mean response (+/- s.d.) was 4.11 (.97) and 4.15 (.95) for Arts and Sciences Students, respectively].

12 To what extent do subject-matter materials contribute to developing cooperative spirit, enjoyment of group work, and respect for other options? [Mean responses (+/- s.d.) was 4.02 (1.06) and 3.93 (1.06) for Arts and Sciences students, respectively].

Those general curriculum items that drew the least positive responses from students of the Arts and Sciences still indicated that they were satisfied (over 3.00) with that aspect of the curriculum. For example, 50 percent, or more, of the students indicated 'somewhat' to 'full' satisfaction. These items are listed below along with the mean response (+/- s.d.) given by students of the Arts and Sciences.

Item	Content
2	To what degree do you see subject-matters handle local environment in such a way that enables you to assess social needs and methods for achieving social objectives? [Mean response (+/- s.d.) was 3.36 (1.11) and 2.95 (1.00) for Arts and Science students, respectively].
3c	To what degree do subject-matters at the Secondary Grade level help you acquire psychomotor skills? [Mean response (+/- s.d.) was 2.25 (1.17) and 1.96 (1.03) for Arts and Sciences students, respectively].
13	To what extent do subject-matter materials at the Secondary Level encourage participation in class and extracurricular activities and develop some interests such as: artistic, literary, scientific, and technologic? [Mean responses (+/- s.d.) were 3.11 (1.14) and 3.09 (1.12) for Arts and Sciences students, respectively].
14	To what degree do you feel that the standard of the subject-matter material is appropriate for the

age level in each grade? [Mean responses (+/- s.d.) were 3.13 (1.14) and 3.21 (1.10) for Arts and Sciences students, respectively].

The responses to item 15 by Arts and Science students seemed particularly noteworthy. This item asked to what extend the students benefited from that part of the Grade 1 curriculum that exposed them to the study of subject matters in the curriculum they did not enter. Fifty percent of the Arts students indicated that the study of the Sciences in Grade 1 was 'seldom' or 'rarely' beneficial to their education. In contrast, 30 percent to 60 percent of the Science students indicated that the study of literary topics of History, Geography, and Civic Education was 'greatly' or 'fully' beneficial to their education.

2. Subject Matters in the Arts

The specific questionnaire items on the subject matters differed for students of the Arts and students of the Sciences.

Students of the Arts responded to groups of items addressing eight subject matter areas: History, Geography, Civic Education and Human Culture, Arabic Language, Islamic Education, General Science, Mathematics, and English. The subject matter areas represent the Arts students' exposure to literary subject matter (History, Geography, Civic Education and Human Culture), science subject matter (General Science and Mathematics), and general or core subject matters (Islamic Education, Arabic Language, and

English Language). The responses by Arts students to each of these subject matter areas are given below.

a. History

Sixty items assessed the success of the History curriculum in developing the students' knowledge of historical events in the world and in the Arab nations (items 16 through 18) as well as in developing the students' skills in scientific thinking and writing (item 19). Arts students indicated that the history curriculum, overall, was 'somewhat' to 'greatly' successful in developing the students' knowledge of historical events. The most common mean response to these items fell between 3.00 and 4.00. A single exception is found in the Art students' response to the Historical Curriculum addressing the Rustumians. The mean response (+/- s.d.) to this item [2.68 (1.15)] suggests that Art students are less than satisfied with the History curriculum on the Rustumians.

Arts students were less satisfied with the History curriculum design to develop their critical thinking abilities. The range mean responses to these items was from 2.56 and 3.29, thereby indicating that Art students were 'seldom' to 'somewhat' satisfied with this aspect of the History curriculum.

b. Geography

Thirteen items assessed the Art students' satisfaction with the geography curriculum, specifically, the type of

information presented (item 20) and its usefulness in developing the skills (item 21) in geography related activities (e.g. "map reading, compass use, writing and reading geography reports..."). Art students' response to these items was very similar to their response to the History items. They reported greater satisfaction with the Geography curriculum's dissemination of basic concepts and facts (typically 'somewhat' to 'greatly' satisfied) than with the instruction of specific geography skills (typically 'seldom' satisfied).

c. Civic Education and Human Culture

Eighty items assessed the Art students' satisfaction with the Civic Education and Human Culture Curriculum, specifically, the presentation of basic concepts in Civic Education (items 22 through 24) and Human Cultures (items 25 through 26) relative to the Omani society, Arab society, and Islamic civilization, and the instruction of basic skills (item 27) in thinking in terms of civics and humanity. Art students' response to these items indicated that they were 'somewhat' to 'greatly' satisfied with the basic concepts given by the Civic Education and Human Culture curriculum; in that, most mean responses fell between 3.00 and 4.00. However, the Arts students were 'seldom' to 'somewhat' satisfied with the basic skills developed by this curriculum; in that, most mean responses to these items fell between 2.00 and 3.00.

d. Arabic Language

Twenty-five items assessed the Art students' satisfaction with the Arabic Language curriculum, specifically, the instruction on grammar and inference (item 28), critique and eloquence (item 29), readings (item 30), test topics (item 31), history of literature and biographies (item 32), and prosody and poetic rhyme (item 33). The mean responses by Art students indicated that they were only 'somewhat' satisfied with the Arabic Language curriculum; in that, the mean responses were around 3.00.

e. Islamic Education

Thirteen items assessed the Art students' satisfaction with the Islamic Education curriculum, specifically, their satisfaction with practical performances of the Islamic Liturgy (item 34), the organization of the Islamic Education (items 35 and 39), the emphasis on the historical aspects of Islam (item 36), the development of thinking skills (item 37), the emphasis on extra-curricular reading on Islamic topics (item 38), the realization of the Secondary-level objectives in Islamic Education (item 40). The mean responses by Art students indicated that they were 'somewhat' to 'greatly' satisfied with the Islamic Education curriculum; in that, the most common mean responses fell between 3.00 and 4.00.

One item, drawing the strongest positive response, seems noteworthy. Item 40b asked to what extent the Islamic

Education curriculum content developed and stabilized the students' loyalty to GOD, loyalty to the Islamic nation, and pride in Islam as a belief and as a system of life. Nearly 60 percent of the Art students indicates that they '<u>fully</u>' agreed. No other item on any subject matter area drew so many students, or even 50 percent of the Art students to responded so positively.

f. General Science

Eleven items assessed the Art students' response to general science items, specifically items addressing the General science curriculum success at presenting contemporary societal problems that directly relate to the study of science (item 41) including science and health, world food problems, the universe, the environment, etc. Art students most often responded by indicating that they were 'somewhat' to 'greatly' satisfied; in that, the most common mean responses fell between 3.00 and 4.00. In fact, the only item that drew a mean response less than 3.00 asked to what extent the Art students were satisfied with the material on meteorology and weather forecasting [mean response (+/- s.d.) = 2.95 (1.28)].

g. Mathematics

Twenty-three items assessed the Art students' satisfaction with the mathematics curriculum, specifically, their satisfaction with the level of comprehension that they have obtained on a number of concepts and skills (item 42),

including logarithms, linear equations, geometric interpretation, theory of maxima, integrals, correlation coefficients, probability, etc. Overall, Art students' response indicated that they were 'seldom' to 'somewhat' satisfied with their level of comprehension on these topics (mean responses fell between 2.00 and 3.00). Concepts and skills in statistics (item 42q-w) seemed to draw the least positive responses with typically 50 percent or more of he students indicating that they were 'seldom' or 'rarely' satisfied with their level of comprehension.

h. English Language

Twenty-eight items assessed the Art students' satisfaction with the English Language curriculum. Most items assessed the instruction and development of reading, writing, speaking, and comprehension skills (items 43, 44, 45, 48, and 49). Other items asked to what extent the English text and cassettes were useful in learning (items 46 and 47) and to what extent the English curriculum encouraged independent and creative thinking (item 50). Overall the response by Art students indicated that they were 'seldom' to 'somewhat' satisfied with the English Language curriculum. The most common mean responses fell between 2.00 and 3.00. Perhaps, the most telling items assessed how well students thought the English Curriculum was preparing them for the use of English outside of school (43a-d). The specific content of these items are given below along with

the mean response (+/- s.d.) given to each item by Art students.

Item 43: To what extent do you feel that the English Language curriculum has realized the following objectives?

a. Enriched your knowledge about the outside world?
[Mean response (+/- s.d.) = 2.86 (1.38)]

b. Provided you with basic English Language skills to enable you to express yourself in written and oral English with foreign nationals in and outside of Oman?
[Mean response (+/- s.d.) = 2.72 (1.25)]

c. Enabled you to use English effectively and creatively both casual and formal situations?
[Mean response (+/- s.d.) = 2.45 (1.13)]

d. encouraged you to read books, journals and magazines in English outside the curriculum?
[Mean response (+/- s.d.) = 2.51 (1.25)]

More than 40 percent of the Art students reported that the English Language curriculum as 'rarely' or 'seldom' successful in meeting the objectives outlined in items 43b through d above.

3. **Subject Matters in the Sciences**

Students of the Sciences responded to groups of items addressing eight subject matter areas: Chemistry, Physics, Biology, Mathematics, Arabic Language, Islamic Education, Human Culture, and English Language. The subject matter areas represent the Science students' exposure to science subject matter (Chemistry, Physics, Biology, and Mathematics), literary subject matter (Human Culture), and general or core subject matters (Islamic Education, Arabic Language, and English Language). The responses by Science

students to each of these subject matter areas are given below.

a. Chemistry

Thirty-seven items assessed the Science students' satisfaction with the Chemistry curriculum, specifically, their comprehension of the topics taught in the chemistry curriculum (item 16) and their skills in performing laboratory experiments in Chemistry (item 17). Science students indicated that they were 'somewhat' to 'greatly' satisfied with their comprehension of the topics taught in chemistry. They typically gave a mean response between 3.00 and 4.00. One exception should be noted, in the responses given to the topic of alkaline earths that drew a mean response (+/- s.d.) of 2.49 (1.12) thereby indicating that science students do not feel comfortable, even 'somewhat', with this topic.

In response to items addressing the development of skills through laboratory experiments, science students indicated that they were nearly 'somewhat' satisfied. The most common mean responses fell at, or just below, 3.00. Science students were least satisfied with the laboratory experiments on the natural resources in Oman including field trips and the use of laboratory apparatus for handling acids and other dangerous materials. Fifty percent or more of the science students indicated that these laboratory experiments were 'seldom' or 'rarely' satisfactory.

b. Physics

Forty-one items addressed the instruction, experimentation and the development of basic concepts (item 18) and skills (item 19) provided by the Physics curriculum. The response by science students to the physics curriculum content items indicated that they were 'somewhat' satisfied with the most common mean responses falling around 3.00.

c. Biology

Forty-two items assessed the science students' satisfaction with the biology curriculum. The format of the biology items, like the format for all science subject matters, provided items to assess the science students' satisfaction with the instruction of concepts (item 20) as well as laboratory and field experimentation (item 21). The mean responses to subtopics in item 20 indicated that the science students were 'somewhat' to 'greatly' satisfied with their comprehension of the topics covered in the biology curriculum. The most common mean responses ranged from 3.00 to 4.00. The mean responses to subtopics in items 21 showed that science students are less than 'somewhat' satisfied with the field and laboratory experiences in biology with the most common mean responses falling, at or just below, 3.00.

d. Mathematics

Sixty-four items addressed the science students' satisfaction with the Mathematics curriculum, specifically

their comprehension of mathematical concepts (item 22) and the development of mathematical skills (item 23). The response by science students to items on mathematical concept comprehension (item 22) indicated that they were near 'greatly' satisfied (mean responses just below 4.00), with the exception of their understanding of solid geometry, conical sections, and integration. In response to these concepts, science students indicated that they were 'seldom' to 'somewhat' satisfied with their comprehension (mean responses between 2.00 and 3.00).

The most common mean response given to items on the development of mathematical skills (e.g. drawing charts, performing calculations, performing statistics calculations, ...) fell between 2.50 and 3.50, thereby suggesting that science students are 'somewhat' satisfied with the development of their mathematics skills.

e. Arabic Language

Ten items addressed the Arabic Language curriculum for Science students. The content of these items specifically assessed the instruction on grammar and inference (item 24), critique and eloquence (item 25), readings (item 26), and text topics (item 27), such as the development of literary appreciation. Science students indicated that they were 'somewhat' satisfied with these aspects of the Arabic Language curriculum. The most common mean response by students fell around 3.00.

f. Islamic Education

Thirteen items assessed the Science students' satisfaction with the Islamic Education curriculum content. These items were identical to the items given to Art students and the response by Science students was equivalent to the response given by Art students. The mean responses by Science students indicated that the students were 'somewhat' to 'greatly' satisfied with the Islamic Education curriculum. The mean responses fell above 3.00.

g. Human Cultures and Contemporary Problems

Twelve items assessed the science students' satisfaction with the Human Cultures and Contemporary Issues curriculum. This curriculum discusses current issues and their effect on social, local, national, and international levels. The science students' responses to items that assessed this curriculum indicated that the Science students were near 'greatly' satisfied. The most common mean responses fell at, or just under, 4.00.

h. English Language

Twenty-eight items assessed the Science students' satisfaction with the English Language curriculum. Most items assessed instruction and development of reading, writing, speaking, and comprehension skills (items 37, 38, 39, 42, and 43). Other items asked to what extent the English text and cassettes were useful in learning (items 40 and 41) and to what extent the English curriculum encourages

independent and creative thinking (item 44). Overall, the response by Science students indicated that they were 'seldom' to 'somewhat' satisfied with the English Language curriculum. The most common mean responses fell between 2.00 and 3.00. The Science students responses to these items is nearly identical to the response by Art students. As in the Art students' case, perhaps the most revealing items assessed how well students thought the English Curriculum was preparing them for the use of English outside of school (37a-d). The specific content of these items are given below along with the mean response (+/- s.d.) given to each item by Art students.

Item 37: To what extent do you feel that the English Language curriculum has realized the following objectives?

a. Enriched your knowledge about the outside world?
[Mean response (+/- s.d.) = 2.85 (1.19)]

b. Provided you with basic English Language skills to enable you to express yourself in written and oral English with foreign nationals in and outside of Oman?
[Mean response (+/- s.d.) = 2.59 (1.22)]

c. Enabled you to use English effectively and creatively in both casual and formal situations?
[Mean response (+/- s.d.) = 2.45 (1.16)]

d. Encouraged you to read books, journals and magazines in English outside the curriculum?
[Mean response (+/- s.d.) = 2.55 (1.23)]

The responses by more than 50 percent of Science students indicated that the English Language curriculum was 'rarely' or 'seldom' successful in meeting the objectives outlined in item 37 b through d above.

4. Methods of Teaching

Art and Science students responded to a series of items that assessed the students' view on the use of and usefulness of the teaching method suggested for the secondary school level (Part II, Section II of the Art and Science student questionnaire). Overall, the mean response by Art and Science students to these items indicated that they were 'seldom' to 'somewhat' satisfied with the specified teaching strategies. The most common mean responses fell between 2.00 and 3.00.

Both Art and Science students gave their least positive response to item 5. This item asked to what extent teachers used a team or project approach in lesson instruction [mean responses (+/- s.d.) by Art and Science students were 2.64 (1.13) and 2.55 (1.08) respectively]. The most positive responses by these students were given to items 9a, 9b, and for Science students item 7. The content of these items is listed below along with the mean response (+/- s.d.) given by Art and/or Science students.

Item 7: To what extent does the teacher's approaches encourage teacher-pupil interaction anc allow students' to express opinions? [Mean response (+/- s.d.) by Science students was 3.31 (1.14)]

Item 9: To what extent do methods of teaching at the secondary level help you develop the following critical thinking habits and attitudes:

a. Suspending judgement? [Mean responses (+/- s.d.) for Art and Science students were 3.29 (1.07) and 3.39 (1.04) respectively].

b. Investigating accuracy of data? [Mean responses (+/- s.d.) for Art and Science students were 3.22 (1.22) and 3.24 (1.04) respectively].

5. **Facilities**

Students of the Arts and Sciences responded to fourteen items on the adequacy of the materials and facilities at the Secondary school level. Their response to these items indicated that they were 'seldom' to 'somewhat' satisfied with their school environment, classrooms, laboratories, libraries, instructional media, and activity centers (e.g. sport stadiums). Most mean responses fell between 2.00 and 3.00. The two items that received the most positive and least positive response, respectively, are listed below along with the mean responses (+/- s.d.) by Art and Science students.

Most strongly positive response:

Item 6e: To what extent are mosques sufficient and appropriate? [Mean responses (+/- s.d.) by Art and Science students were 3.65 (1.49) and 3.54 (1.48) respectively].

Least positive response:

Item 6d: To what extent are theaters sufficient and appropriate? [Mean responses (+/- s.d.) by Art and Science students were 2.08 (1.24) and 2.00 (1.13) respectively].

6. **Evaluation Methods**

Art and Science students responded to eleven items on the evaluation techniques used at the Secondary level in Oman. These items assessed the appropriateness of using different types of tests (items 1a-c), the type of

information assessed at the Secondary level (items 2a-e), and the frequency of testing (items 3a-c). Both Art and Science students, indicated that they were 'somewhat' to 'greatly' satisfied with the appropriateness of each type of tests and the frequency of tests. The mean responses most commonly fell between 3.00 and 4.00. Art and Science students also indicated that the evaluation of facts, comprehension, ability to analyze and apply information, and problem-solving skills were, on the average, 'sometimes' successful. The mean responses fell around 3.00.

7. Textbooks

A different group of Art and Science students responded to textbook items in order to reduce the difficulty, fatigue, and time in the procedure of completing the questionnaire. Both Art and Science students responded to items that addressed the textbooks used in Islamic Education, Arabic Language, and English Language. Art students responded to questionnaire items on textbooks on the History of Arabic Literature, Social Studies, General Sciences, and Mathematics in the Arts program. Science students responded to questionnaire items on textbooks in Chemistry, Physics, Biology, Mathematics in the Sciences, and Human Culture and Contemporary Problems.

Similar types of items were assessed for the textbooks on each subject matter. Typically, students were asked to

what extent the textbook adequately, or satisfactorily, manifests several characteristics including its organization, clarity, age-related appropriateness in terms of content and practical exercises; its relationship with similar textbooks in previous grades; its relationship with textbooks in other subject matters of the same-grade; its appearance (shape, volume, quality of print); and the usefulness of the practical exercises, illustrations, charts, and pictures as learning tool. Regardless of the subject matter addressed by the textbook, Art and Science students reported that the textbook was 'somewhat' satisfactory along these lines. In fact, the range of mean responses to all textbook items (totalling 228 items) by Art and Science students was very small: 2.61 to 3.35 for Art students and 2.47 to 3.61 for Science students. The pattern of response to each textbook was indistinguishable, either within Art students or Science students or between Art and Science students. The specific textbooks assessed are listed below.

Assessed by Both Art and Science Students

- Islamic Education textbook
- Arabic Language Reading and Text textbook
- Arabic Language Linguistic Applications textbook (grammar and inference)
- Arabic Language Linguistic Applications textbook (literary criticism, Rhetoric, and Prosody)
- English Language New Age Secondary textbook
- English Language S. Book and Work Book textbooks

Assessed by Art Students Only

- History of Arabic Literature textbook
- Regional Geography textbook
- History of Oman and the Arab Gulf textbook

- Civic Education textbook
- Human Sagacity (Culture) textbook
- General Science textbook
- Mathematics for Grade 3 Secondary (Literary Section) textbook

Assessed by Science Students Only

- Chemistry textbook
- Physics textbook
- Biology textbook
- Mathematics for Grade 3 Secondary (Science section) textbook
- Contemporary Problems textbook

C. Graduates

A sample of 110 Omani citizens who had graduated from the Omani Secondary School in 1987 or later were gathered and asked to respond to a short questionnaire that assessed their satisfaction with the curriculum content (Part II Section I), method of teaching (Part II Section II), material and facilities (Part II Section III), evaluation techniques (Part II Section IV), and textbooks (Part II Section V) of their Secondary level education. The items in this questionnaire were similar in content and wording to the items given to students with the exception to items on specialized subject matter areas. The magnitude and quality of response given by these graduates is reported below by the general area of information assessed: curriculum content, method of teaching, material and facilities, evaluation techniques, and textbooks

a. Curriculum Content

Eighteen items assessed the graduates' satisfaction with the curriculum content at the Secondary school level.

For example, these items assessed to what extent graduates thought that the curriculum content at the secondary school level had helped them to understand scientific and technical developments (item 4), to acquire scientific approaches to problem-solving (item 9), to assist them in higher levels of education (item 6) or to obtain their current job (item 7), to develop self-respect and loyalty to the country and to the Arab world (item 12), etc. Overall, most mean responses fell between 3.00 and 4.00 thereby indicating that graduates found the Secondary level education 'somewhat' to 'greatly' adequate.

The most strongly positive response was given to item 13 that asked to what extent the graduates' Secondary level studies developed a positive attitude toward the utilization and conservation of natural resources [mean response (+/- s.d.) = 4.27 (.98)]. More than 80 percent of the graduates indicated that this attitude was 'greatly' or 'fully' developed by their secondary school education. The least positive response was given to item 3a that assessed the extent that the graduates believed that the subject-matters they studied helped them develop psycho-motor skills [mean response (+/- s.d.) = 2.09 (1.18)].

2. <u>Methods of Teaching</u>

Twelve items assessed the graduates' satisfaction with the methods of teaching at the Secondary school level. These items asked to what extent the graduates thought (a)

teachers related the curriculum to everyday life experiences (item 1), (b) teachers used appropriate methods and techniques to present subject matter (item 2), (c) teachers used methods that met each student's different level of achievement (item 3), (d) teachers used methods and techniques that allowed students the opportunity to express themselves (item 4), (e) teachers used team and project approaches (item 5), (f) teachers used other instructional media materials effectively (item 6), (g) teachers encouraged self-learning (item 7), (h) teachers used methods and presented material in a manner consistent with the textbooks (item 8), and (i) teaching methods helped develop critical thinking skills (item 9a-d). Overall, the mean responses by graduates most often fell between 2.00 and 3.00 thereby indicating that these graduates found the methods of teaching 'seldom' to 'somewhat' adequate in meeting the requirement listed above.

The most strongly positive response was given to item 9a that asked to what extent graduates thought that they had learned to assess the accuracy of information. The mean response (+/- s.d.) to this item was 3.24 (1.13) and indicated that graduates thought that their secondary school education had only 'somewhat' prepared them to assess the accuracy of information, even though, they had been prepared 'best' on this topic. The least positive response was given to item 5 that asked to what extent team and/or project

approaches were used at the Secondary level. The mean response (+/- s.d.) indicated that project and/or team approaches were used 'seldom' [2.29 (1.14)].

3. **Facilities**

Fourteen items assessed the graduates' satisfaction with the material and facilities of the secondary school level. These items asked to what extent graduate were satisfied with the environment (item 1), classroom dimensions and lighting (item 2), laboratory apparatus and experimentation (item 3), libraries (item 4), availability and quality of instructional media (item 5), and the availability of various extracurricular facilities (item 6). The most commonly obtained mean response by graduates fell between 2.00 and 3.00. The graduates indicated that the material and facilities were found to be 'seldom' to 'somewhat' satisfactory.

4. **Evaluation Methods**

Eleven items assessed the graduates' satisfaction with the type (item 1), frequency (item 3), and accuracy of tests (item 2) at the Secondary school level. The mean responses to these items by graduates indicated that they were 'somewhat' to 'greatly' satisfied with the evaluation methods at the Secondary school level. Most mean responses fell between 3.00 and 4.00.

5. Textbook

Eleven items assessed the graduates' satisfaction with the textbooks used at the Secondary school level. For example, these items asked to what extent the textbooks were appropriate to the students' intellectual level, and were clear and up-to-date. Graduates indicated that the textbooks used by them at the secondary level were only 'somewhat' satisfactory along these lines. The mean responses fell around 3.00. The most strongly positive response was given to item 1k that asked to what extent the maps, figures, tables, and pictures were clear [mean response (+/- s.d.) = 3.56 (1.27)]. The least positive response was given to item 1h that asked to what extent the textbook was effective in suggesting activities and practical applications [mean response (+/- s.d.) = 2.55 (1.16)].

D. Parents

One hundred parents were asked to answer a short questionnaire addressing their view of the current Secondary school level education. The response, overall, indicated that they were 'somewhat' to 'greatly' satisfied with the Secondary school education. Most mean responses fell between 3.00 and 4.00.

In response to item 1, parents indicated that their children had 'somewhat' difficulty to 'seldom' difficulty

with the new curriculum regardless of the subject matter assessed. For the subject matter areas of Islamic Education, Arabic Language, Geography, History, Human Culture, Civic Education, and General Sciences, more than 80 percent of all parents reported the child 'rarely' to 'sometimes' had difficulty. Slightly greater levels of difficulty were reported for the subject matter areas of Physics, Chemistry, Biology, Mathematics, and English Language. A similar pattern of response was given to item 3 that assessed the parents' opinion on the level of difficulty of homework in each subject matter area. Overall, parents reported that the amount of homework was only 'sometimes' sufficient [mean response (+/- s.d.) to item 2 was 3.29 (1.40)].

Parents reported that their children almost always study daily [mean response (+/- s.d.) to item 5 was 3.66 (1.17)], by spending some of their time doing homework, studying material learned that day, and studying for tomorrow's lesson (items 6a-c) and by spending less time watching television, listening to the radio, or playing outside (items 6e and 6f).

Parents reported that they 'seldom' to 'sometimes' read their child's textbooks (item 7). They were most likely to read the History textbooks [mean response (+/- s.d.) = 3.00 (1.33)] and least likely to read the Physics textbooks [mean response (+/- s.d.) = 2.00 (1.27)]. However, the response

of the parents to item 8 indicated that they have looked over the textbooks because they reported that they found the textbooks to be well designed and printed, attractive, interesting, and age-appropriate.

Parents reported that they encouraged their child to talk about school to a great extent [mean response (+/- s.d.) = 3.81 (1.28)] and had found that their child talked about school enthusiastically 'sometimes' [mean response (+/- s.d.) = 3.26 (1.28) and negatively 'seldom' [mean response (+/- s.d.) = 2.46 (1.21)].

Parents reported that they typically assessed their child's progress by grade reports [mean response (+\- s.d.) = 4.21 (1.14)] and 'sometimes' by teacher meetings [mean response (+/- s.d.) = 3.48 (1.41)].

Finally, more than 70 percent of the parents indicated that they were 'greatly' or 'fully' satisfied with the suitability of the Omani curriculums to educate their child in the Islamic values, Arabic culture, Omani heritage, and modern science and technology.

IV. A COMPARISON BY DEMOGRAPHIC, ACADEMIC, AND TEACHING BACKGROUND OF THE RESPONSES GIVEN TO THEORY, PROCESS AND PRACTICE, AND RESOURCES ITEMS BY TEACHERS, SUPERVISORS, AND ADMINISTRATORS: ONE-WAY ANOVA

Teacher, supervisor, and administrator response to questionnaire items on the Omani educational objectives (THEORY), methods of instruction and student assessment techniques (PROCESSES and PRACTICES), and staff, facilities,

textbooks, and the teacher's manual (RESOURCES) were assessed in light of these subjects' demographic background (gender, nationality, or district of employment), academic background (educational preparation, in-service training time, place of in-service training, or workshop attendance) and, on teacher and supervisor samples, teaching experience (number of years in total or number of years in Oman). The information used to construct the independent variables that segregated subjects by demographic, academic, or teaching background was drawn from the subject's response to Part I Section A of the questionnaire (Demographic Information). To this section of the questionnaire subjects responded by indicating which category, of two or more listed after each items, best described their background. The categories were either naturally determined as in that item that asked for the subject's gender (two categories - male or female) or predetermined by the investigators as in that item that asked for the subject's teaching experience (four categories - 1 to 3 years, 4 to 6 years, 7 to 10 years or more than 10 years). In the latter cases, the categories were designed to represent functionally significant groupings[3]. In this

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3 Some categories were combined after data collection when it became apparent that the actual distribution of responses per category differed from the initial expectation. E.g. in response to that item that assessed educational preparation all but a very few teachers had obtained a college degree making non-college degree orientated categories less appropriate. All non-college degree levels of educational preparation were subsequently combined into one category, named 'other'.

way, nine non-manipulated independent variables were obtained, evaluating either the subjects' demographic, academic, or teaching background (gender, nationality, district of employment, educational preparation, amount of in-service training, location of in-service training, workshop attendance, teaching experience, and teaching experience in Oman).

It was predetermined that all analyses would be performed on each educator group separately (teachers, supervisors, and administrators). Additional subdivisions of the teacher and supervisor groups (by the twelve subject matter areas) was originally planned, however, the latter design did not prove to be statistically feasible for two reasons: (a) an insufficient number of subjects in some subject matter areas and (b) a highly skewed distribution (of subjects) within some independent variables. So among teachers of General Sciences (n=31), teachers of Human Cultures (n=33), teachers of Civic Education (n=40), and supervisors from every subject matter area too small a number of subjects were available and/or sampled. In these cases, the distribution of subjects across the independent variables, especially those variables that had many possible categories of responses, typically lead to an insufficient numbers of subjects per category ($n < 5$). And any statistical analysis yielded unreliable results. For example, among teachers of General Sciences, Human Cultures,

and Civic Education, and among all subdivisions of supervisors, the number of subjects sampled from each (or most) districts of employment fell below five and, consequently, any conclusion about the impact of district of employment on the responses given to questionnaire items would be unreliable.

The second complication to surfaced in the statistical analyses related to the nature of the secondary school teacher and supervisor. Supervisors and, to a lesser extent teachers at this level of education, do not show overwhelmingly diverse backgrounds and are in fact, as a group, similar in academic background, teaching experience, and at least one demographic background variable (nationality). The net impact is that all but a few subjects fell into one category. Thus, in order to evaluate whether deviation from the 'typical background' accounted for deviation in the responses given to the Theory, Process and Practice, or Resource sections of the questionnaire, teachers and supervisors would need to be assessed statistically by a subdivisions larger than that of the subject matter area. Therefore, another plan for subdividing the teacher and supervisor samples was developed.

An alternative to assessing subjects by subject matter area was to assess them by the general area of instruction to which they belonged: arts (History, Civic Education,

Geography and Contemporary Problems, and human cultures), sciences (mathematics, General Sciences, Chemistry, Physics, and Biology), or the shared subject matters (Islamic Education, Arabic Language, and English language). This system of subdivision worked well for the teacher sample in that at least two categories within each independent variable contained enough subjects to permit a reliable statistical analysis. Among supervisors, this subdivision still produced cases in which the number of supervisors was too small although many analyses were possible. However, as the initial descriptive analysis of the responses (mean responses and frequency of responses) has indicated, the responses given by Islamic Education supervisors differed so greatly from the responses given by all other supervisors they could not be combined with the Arabic Language and English Language supervisors (**shared subject matters**). Consequently, Islamic Education supervisors were assessed alone.

Each independent variable, the corresponding response categories, and the final subject numbers per category are given in Tables 15 through 23. The statistical analysis of the effect of each independent variable on the subject response to either THEORY, PROCESS and PRACTICE, and RESOURCE portions of the questionnaire were performed in all cases in which at least two categories contained five or more subjects.

Table 15: Sample of teachers and supervisors by district of employment.

	DISTRICT								
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa
TEACHERS:									
Shared Subject Matters	43	45	40	40	34	23	40	39	18
Arts Subjects	35	34	25	30	16	16	21	24	11
Science Subjects	47	48	39	41	28	26	36	36	8
SUPERVISORS:									
Shared Subject Matters	6	5	3	5	4	3	3	4	2
Islamic Education	1	1	1	1	2	2	1	2	1
Arts Subjects	4	3	2	3	3	4	1	4	0
Science Subjects	3	6	2	3	2	3	3	5	1

Table 16: Sample of teachers and supervisors by gender.

	GENDER	
	Male	Female
TEACHERS:		
Shared Subject Matters	178	144
Arts Subjects	135	77
Science Subjects	193	116
SUPERVISORS:		
Shared Subject Matters	31	4
Islamic Education	12	0
Arts Subjects	21	3
Science Subjects	26	2

Table 17: Sample of teachers and supervisors by nationality.

	NATIONALITY	
	Omani	Non-Omani
TEACHERS:		
Shared Subject Matters	47	274
Arts Subjects	20	192
Science Subjects	17	290
SUPERVISORS:		
Shared Subject Matters	3	31
Islamic Education	2	10
Arts Subjects	4	20
Science Subjects	0	28

Table 18: Sample of teachers and supervisors by years of teaching experience.

	NUMBER OF YEARS			
	1-3	4-6	7-10	>10
TEACHERS:				
Shared Subject Matters	43	47	46	186
Arts Subjects	14	23	22	153
Science Subjects	27	27	75	180
SUPERVISORS:				
Shared Subject Matters	12	2	0	21
Islamic Education	9	2	1	0
Arts Subjects	14	10	0	0
Science Subjects	18	10	0	0

Table 19: Sample of teachers and supervisors by years of teaching experience in Oman.

	NUMBER OF YEARS			
	1-3	4-6	7-10	>10
TEACHERS:				
Shared Subject Matters	176	74	41	31
Arts Subjects	133	52	17	10
Science Subjects	197	66	26	20
SUPERVISORS:				
Shared Subject Matters	23	5	3	4
Islamic Education	11	0	1	0
Arts Subjects	22	2	0	0
Science Subjects	24	4	0	0

Table 20: Sample of teachers and supervisors by amount of in-service training.

	AMOUNT			
	0 mos	<1 - 3 mos	4 - 12 mos	1 - 2 yrs
TEACHERS:				
Shared Subject Matters	44	171	25	82
Arts Subjects	27	151	9	25
Science Subjects	51	204	18	36
SUPERVISORS:				
Shared Subject Matters	0	3	3	29
Islamic Education	1	0	0	11
Arts Subjects	2	0	0	22
Science Subjects	6	0	0	22

Table 21: Sample of teachers and supervisors by location of in-service training.

	LOCATION	
	In Oman	Outside of Oman
TEACHERS:		
Shared Subject Matters	96	226
Arts Subjects	40	172
Science Subjects	68	241
SUPERVISORS:		
Shared Subject Matters	18	17
Islamic Education	8	4
Arts Subjects	20	4
Science Subjects	17	11

Table 22: Sample of teachers and supervisors by number of workshops attended.

	NUMBER OF WORKSHOPS				
	0	1	2	3	>3
TEACHERS:					
Shared Subject Matters	80	57	44	39	102
Arts Subjects	55	53	38	36	30
Science Subjects	48	54	90	51	66
SUPERVISORS:					
Shared Subject Matters	17	0	1	0	17
Islamic Education	11	0	0	0	1
Arts Subjects	24	0	0	0	0
Science Subjects	27	0	1	0	0

Table 23: Sample of teachers and supervisors by level of education.

	EDUCATIONAL PREPARATION		
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^
TEACHERS:			
Shared Subject Matters	120	115	87
Arts Subjects	123	69	19
Science Subjects	229	60	20
SUPERVISORS:			
Shared Subject Matters	5	5	25
Islamic Education	0	0	12
Arts Subjects	0	0	24
Science Subjects	0	1	27

^ REFERS TO NON-COLLEGE OR UNIVERSITY DEGREE

The effect of each independent variable on the responses given by teachers, supervisors, and administrators to portions of the questionnaire addressing THEORY, PROCESS and PRACTICE, and RESOURCES are reported below by independent variable and by questionnaire section.

A. Gender

While, gender had little influence on the responses given by teachers to any portion of the questionnaire, gender significantly influenced the responses given to PROCESS and PRACTICE and RESOURCE questionnaire items by administrators. Since less than 5 female supervisors per area of instruction were available for sampling, no statistical analyses were performed on the effect of gender on supervisor response to questionnaire items, however the mean responses by male supervisors and those few female supervisors sampled are reported in the tables below.

1. Theory

Table 24 presents the results obtained from the statistical comparisons of the responses given to Omani educational objective (THEORY) items by males and females.

No statistically significant differences in the responses given to Omani educational objective items were found between male and female administrators or male and female teachers of either the shared subject matters, the arts, or the sciences.

Table 24: Teacher, supervisor, and administrator response to Educational Objective items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
TEACHERS:					
Shared Subject Matters	3.71 (177)	3.65 (144)	<1	1,319	
Arts Subjects	4.13 (134)	4.17 (77)	<1	1,209	
Science Subjects	3.87 (192)	3.97 (116)	1.97	1,306	0.161
SUPERVISORS:					
Shared Subject Matters	3.65 (31)	2.80 (4)			
Islamic Education	1.88 (12)	---- (0)			
Arts Subjects	3.94 (21)	3.63 (3)			
Science Subjects	3.85 (26)	3.99 (2)			
ADMINISTRATORS:	4.06 (45)	4.13 (30)	<1	1,73	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

2. Process and Practice

Table 25 presents the results obtained from the statistical comparisons of the responses given to method of instruction and student assessment technique (PROCESS and PRACTICE) items by males and females.

No statistically significant differences were found in the responses given to method of instruction items between male and female teachers of either the shared subject matters, the arts, or the sciences. Among administrators,

statistically significant differences were found in the responses given to method of instruction items between males and females [$F(1,73) = 13.61$, $p < 0.001$]. The mean responses by male [mean response (+/- s.d.) = 3.48 (0.63)] and female [mean response (+/- s.d.) = 3.95 (0.37)] administrators indicated that female administrators are more satisfied with the methods of instruction used at the secondary school level than male administrators.

No statistically significant differences in the responses given to student assessment technique items were found between male and female teachers of the shared subject matters or the arts. Among teachers of the sciences, however, a small but statistically significant difference as a function of gender was found [$F(1,300) = 3.89$, $p = 0.049$]; that is female teachers of the sciences [mean response (+/- s.d.) = 3.78 (0.45)] reported statistically greater satisfaction with the student assessment techniques than male teachers of the sciences [mean response (+/- s.d.) = 3.67 (0.51)].

Among administrators, like teachers of the sciences, a small but statistically significant difference between males [mean response (+/- s.d.) = 3.54 (0.50)] and females [mean response (+/- s.d.) = 3.88 (0.44)] was found [$F(1,73) = 9.24$, $p = 0.003$], and as in other statistically significant effects of gender, females reported greater satisfaction with the student assessment techniques than males.

Table 25: Teacher, supervisor, and administrator response to Classroom Activity items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Methods of Instruction Items					
TEACHERS:					
Shared Subject Matters	3.46 (176)	3.38 (144)	<1	1,318	
Arts Subjects	3.64 (135)	3.47 (76)	2.41	1,209	0.122
Science Subjects	3.48 (188)	3.49 (114)	<1	1,300	
SUPERVISORS:					
Shared Subject Matters	3.46 (30)	2.84 (4)			
Islamic Education	2.29 (12)	---- (0)			
Arts Subjects	3.42 (21)	2.91 (3)			
Science Subjects	3.51 (26)	3.18 (2)			
ADMINISTRATORS:	3.48 (45)	3.95 (30)	13.61	1,73	<0.001*
Student Assessment Items					
TEACHERS:					
Shared Subject Matters	3.58 (176)	3.52 (144)	<1	1,318	
Arts Subjects	3.86 (135)	3.92 (76)	<1	1,209	
Science Subjects	3.67 (188)	3.78 (114)	3.89	1,300	0.049*
SUPERVISORS:					
Shared Subject Matters	3.46 (30)	3.08 (4)			
Islamic Education	2.14 (12)	---- (0)			
Arts Subjects	3.56 (21)	2.85 (3)			
Science Subjects	3.59 (26)	3.60 (2)			
ADMINISTRATORS:	3.54 (45)	3.88 (30)	9.24	1,73	0.003*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

3. Resources

Table 26 presents the results obtained from the statistical comparisons of the responses given to items on the availability and quality of the staff, facilities, textbooks, and teachers' manuals (RESOURCES) by males and females.

No statistically significant differences in the responses given to RESOURCE portions of the questionnaire were found between male and female teachers of either the shared subject matters, the arts, or the sciences.

In contrast, male and female administrators differed significantly in the responses they gave to two RESOURCE portions of the questionnaire: Staff $F(1,73) = 9.31$, $p = 0.003$ and Facilities $F(1,73) = 5.48$, $p = 0.022$]. In each case, female administrators reported slightly greater satisfaction with the quality of these resources than male administrators.

B. Nationality

Overall, nationality did not greatly influence the responses given to any questionnaire items by teachers of the arts, teachers of the sciences, or administrators. Nationality did influence in a general way the responses given by teachers of the shared subject matters. In the latter case, those teachers of non-Omani nationality reported statistically greater satisfaction and/or agreement with questionnaire items than those of Omani nationality.

Table 26: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook, and Teacher's Manual items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Human Resources: Staff Items					
TEACHERS:					
Shared Subject Matters	3.30 (171)	3.33 (142)	<1	1,311	
Arts Subjects	3.41 (135)	3.35 (75)	<1	1,208	
Science Subjects	3.18 (187)	3.28 (115)	1.55	1,300	0.214
SUPERVISORS:					
Shared Subject Matters	3.47 (31)	3.29 (4)			
Islamic Education	2.38 (12)	---- (0)			
Arts Subjects	3.05 (21)	2.36 (3)			
Science Subjects	3.36 (26)	2.75 (2)			
ADMINISTRATORS:	3.31 (45)	3.73 (30)	9.31	1,73	0.003*
Physical Resources: Equipment, Facilities, and Materials Items					
TEACHERS:					
Shared Subject Matters	3.19 (171)	3.27 (142)	<1	1,311	
Arts Subjects	2.97 (135)	3.02 (75)	<1	1,208	
Science Subjects	3.00 (187)	3.11 (115)	1.39	1,300	0.239
SUPERVISORS:					
Shared Subject Matters	3.38 (31)	3.32 (4)			
Islamic Education	2.64 (12)	---- (0)			
Arts Subjects	3.09 (21)	2.41 (3)			
Science Subjects	3.29 (26)	2.74 (2)			
ADMINISTRATORS:	3.11 (45)	3.51 (30)	5.48	1,73	0.022*
Textbook Items					
TEACHERS:					
Shared Subject Matters	3.46 (171)	3.44 (142)	<1	1,311	
Arts Subjects	3.71 (133)	3.67 (73)	<1	1,204	
Science Subjects	3.46 (185)	3.54 (115)	1.03	1,298	0.311
SUPERVISORS:					
Shared Subject Matters	3.67 (31)	3.21 (4)			
Islamic Education	2.08 (12)	---- (0)			
Arts Subjects	3.43 (21)	3.48 (3)			
Science Subjects	3.60 (26)	3.26 (2)			
Teacher's Manual Items					
TEACHERS:					
Shared Subject Matters	3.39 (160)	3.28 (138)	1.97	1,296	0.161
Arts Subjects	3.31 (134)	3.23 (73)	<1	1,205	
Science Subjects	3.14 (180)	3.12 (113)	<1	1,291	
SUPERVISORS:					
Shared Subject Matters	3.55 (30)	2.96 (4)			
Islamic Education	2.34 (12)	---- (0)			
Arts Subjects	3.14 (21)	3.04 (3)			
Science Subjects	3.23 (26)	3.08 (2)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Since less than 5 Omani supervisors per area of instruction were available for sampling, no statistical analyses were performed on the effect of nationality on supervisor response to questionnaire items. However, the mean responses given by non-Omani supervisors and those few Omani supervisors sampled are reported in the tables below.

1. Theory

Table 27 presents the results obtained from the statistical comparisons of the responses given to Omani educational objective (THEORY) items by Omani and non-Omani nationals.

No statistically significant differences in the responses given to Omani educational objective items were found between Omani and non-Omani administrators or teachers of the arts. Among teachers of the shared subject matters and teachers of the sciences, the responses given to Omani educational objective items by Omani nationals differed statistically from the responses given by non-Omani nationals [shared subject matters $F(1,318) = 15.80$, $p < 0.001$, and the sciences $F(1,304) = 21.23$, $p < 0.001$], such that the non-Omani teachers of the shared subject matters and the sciences [mean responses (+/-s.d.) of 3.76 (0.77) and 3.95 (0.52) respectively] indicated that they were more satisfied with Omani educational objectives than the Omani teachers of the shared subject matters and the sciences

[mean responses (+/- s.d.) of 3.27 (0.87) and 3.33 (0.75) respectively].

Table 27: Teacher, supervisor, and administrator response to Educational Objective items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
TEACHERS:					
Shared Subject Matters	3.27 (47)	3.76 (273)	15.80	1,318	<0.001*
Arts Subjects	4.18 (20)	4.14 (191)	<1	1,209	
Science Subjects	3.33 (17)	3.95 (289)	21.23	1,304	<0.001*
SUPERVISORS:					
Shared Subject Matters	3.02 (3)	3.63 (31)			
Islamic Education	1.79 (2)	1.90 (10)			
Arts Subjects	3.74 (4)	3.93 (20)			
Science Subjects	---- (0)	3.86 (28)			
ADMINISTRATORS:	4.06 (32)	4.11 (43)	<1	1,73	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

2. Process and Practice

Table 28 presents the results obtained from the statistical comparisons of the responses given to method of instruction and student assessment technique items (PROCESS and PRACTICE) by Omani and non-Omani nationals.

No statistically significant differences in the responses given to methods of instruction items were found

between Omani and non-Omani administrators or teachers of either the arts or the sciences. Among teachers of the shared subject matters, however, statistically significant differences in the responses given to method of instruction items by Omani and non-Omani nationals were found [$F(1,317) = 9.60$, $p = 0.002$]; those of non-Omani nationality [mean response (+/- s.d.) = 3.47 (0.73)] reported greater satisfaction with the methods of instruction used in the Omani secondary school level than those of Omani nationality [mean response (+/- s.d.) = 3.11 (0.76)].

No statistically significant differences in the responses given to student assessment technique items were found between Omani and non-Omani administrators, teachers of the shared subject matters, teachers of the arts, or teachers of the sciences.

3. Resources

Table 29 presents the results obtained from the statistical comparisons of the responses given by Omani and non-Omani nationals to items on the availability and quality of the staff, facilities, textbooks, and teacher's manual (RESOURCES).

Table 28: Teacher, supervisor, and administrator response to Classroom Activity items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Methods of Instruction Items					
TEACHERS:					
Shared Subject Matters	3.11 (47)	3.47 (272)	9.60	1,317	0.002*
Arts Subjects	3.61 (20)	3.58 (191)	<1	1,209	
Science Subjects	3.40 (14)	3.49 (286)	<1	1,298	
SUPERVISORS:					
Shared Subject Matters	3.09 (3)	3.44 (30)			
Islamic Education	2.00 (2)	2.35 (10)			
Arts Subjects	3.18 (4)	3.40 (20)			
Science Subjects	---- (0)	3.48 (28)			
ADMINISTRATORS:	3.63 (32)	3.70 (43)	<1	1,73	
Student Assessment Items					
TEACHERS:					
Shared Subject Matters	3.39 (47)	3.58 (272)	2.88	1,317	0.091
Arts Subjects	4.01 (20)	3.87 (191)	1.35	1,209	0.247
Science Subjects	3.51 (14)	3.73 (286)	2.69	1,298	0.102
SUPERVISORS:					
Shared Subject Matters	3.10 (3)	3.46 (30)			
Islamic Education	1.55 (2)	2.25 (10)			
Arts Subjects	3.09 (4)	3.55 (20)			
Science Subjects	---- (0)	3.60 (28)			
ADMINISTRATORS:	3.63 (32)	3.71 (43)	<1	1,73	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

In response to Staff questionnaire items, no statistically significant differences were found as a function of nationality among administrators or teachers of either the arts, or the sciences. However, among teachers of the shared subject matters, a statistically significant difference was found in the responses given to staff questionnaire items [$F(1,310) = 10.19$, $p = 0.002$]. In this latter analysis, the mean responses (+/- s.d.) of non-Omani [3.37 (0.68)] and Omani [3.00 (0.73)] teachers of the shared subject matters indicated that non-Omani nationals were slightly more satisfied than Omani nationals with the availability and quality of the staff.

In response to questionnaire items about the facilities, no statistically significant differences were found among teachers of the arts or teachers of the sciences, however, among teachers of the shared subject matters and administrators, statistically significant differences in the responses given to facilities items were found [$F(1,310) = 12.00$, $p < 0.001$ and $F(1,73) = 5.23$, $p = 0.025$ respectively]. In both cases of significance, non-Omani subjects [mean responses (+/- s.d.) of 3.29 (0.78) and 3.43 (0.76) for teachers of the shared subject matters and administrators respectively] reported statistically greater satisfaction with the availability and quality of the facilities than Omani subjects [mean responses (+/- s.d.) of

2.84 (0.69) and 3.05 (0.67) for teachers in the shared subject matters and administrators respectively].

In response to textbook items, teachers of the arts and teachers of the sciences did not differ statistically as a function of their nationality. However, among teachers the shared subject matters, those of non-Omani nationality [mean response (+/- s.d.) = 3.52 (0.70)] reported statistically [$F(1,310) = 16.05$, $p < 0.001$] greater satisfaction with the textbooks that those of Omani nationality [mean response (+/- s.d.) = 3.02 (0.90)].

In response to teacher's manual items, of Omani and non-Omani teachers of either the shared subject matters [$F(1,296) = 6.70$, $p = 0.010$] or the arts [$F(1,205) = 6.61$, $p < 0.011$] differed significantly. In both analyses, non-Omani nationals [mean responses (+/- s.d.) of 3.37 (0.68) and 3.34 (0.88) respectively] reported statistically greater satisfaction with the teacher's manual than Omani nationals [mean responses (+/- s.d.) of 3.05 (0.72) and 2.78 (0.87) respectively].

No statistically significant differences in responses given to teachers manual items was found between Omani and non-Omani teachers of the sciences.

Table 29: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook, and Teacher's Manual items by nationality.

	NATIONALITY: Omani $\bar{X}$ (n)	NATIONALITY: non-Omani $\bar{X}$ (n)	F	df	p
Human Resources: Staff Items					
TEACHERS:					
Shared Subject Matters	3.00 (41)	3.37 (271)	10.19	1,310	0.002*
Arts Subjects	3.73 (20)	3.35 (190)	3.62	1,208	0.059
Science Subjects	3.35 (14)	3.22 (286)	<1	1,298	
SUPERVISORS:					
Shared Subjects Matters	3.57 (3)	3.49 (31)			
Islamic Education	1.90 (2)	2.47 (10)			
Arts Subjects	2.72 (4)	3.02 (20)			
Science Subjects	---- (0)	3.31 (28)			
ADMINISTRATORS:	3.38 (32)	3.56 (43)	1.44	1,73	0.234
Physical Resources: Equipment, Facilities, and Materials Items					
TEACHERS:					
Shared Subject Matters	2.84 (41)	3.29 (271)	12.00	1,310	<0.001*
Arts Subjects	3.12 (20)	2.97 (190)	<1	1,208	
Science Subjects	3.27 (14)	3.03 (286)	1.27	1,298	0.260
SUPERVISORS:					
Shared Subject Matters	3.57 (3)	3.38 (31)			
Islamic Education	2.68 (2)	2.64 (10)			
Arts Subjects	2.75 (4)	3.06 (20)			
Science Subjects	---- (0)	3.25 (28)			
ADMINISTRATORS:	3.05 (32)	3.43 (43)	5.23	1,73	0.025*
Textbook Items					
TEACHERS:					
Shared Subject Matters	3.02 (40)	3.52 (272)	16.05	1,310	<0.001*
Arts Subjects	3.54 (18)	3.71 (188)	1.01	1,204	0.315
Science Subjects	3.42 (13)	3.50 (285)	<1	1,296	
SUPERVISORS:					
Shared Subject Matters	3.44 (3)	3.65 (31)			
Islamic Education	1.50 (2)	2.12 (10)			
Arts Subjects	3.62 (4)	3.40 (20)			
Science Subjects	---- (0)	3.57 (28)			
Teacher's Manual Items					
TEACHERS:					
Shared Subject Matters	3.05 (34)	3.37 (264)	6.70	1,296	0.010*
Arts Subjects	2.78 (18)	3.34 (189)	6.61	1,205	0.011*
Science Subjects	3.50 (9)	3.13 (283)	2.42	1,290	0.121
SUPERVISORS:					
Shared Subject Matters	3.20 (3)	3.51 (31)			
Islamic Education	1.84 (2)	2.44 (10)			
Arts Subjects	3.20 (4)	3.11 (20)			
Science Subjects	---- (0)	3.22 (28)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

C. District of Employment

Typically, district of employment did influence the responses given to questionnaire items by teachers and administrators. Among teachers, statistically significant differences were usually isolated between the extreme high (typically Dhahirah) and low (typically Janoubiyah or Wousta) response groups. Among administrators, significant differences in response as a function of district of employment by one-way ANOVA, did not typically obtain statistical significance in the subsequent Scheffe pairwise comparison test. Since so few supervisors per district were available by area of instruction for sampling, no statistical analyses of the effect of district of employment on supervisor response to questionnaire items were performed, however the mean responses of those supervisors that were sampled in each district are reported in the tables below.

1. Theory

Table 30 presents the results obtained from the statistical comparisons of the responses given to Omani educational objective items (THEORY) by subjects from each of the nine districts.

By one-way ANOVA, statistically significant differences in the responses given to Omani educational objective items as a function of district of employment were found among teachers of shared subject matters [$F(8,311) = 4.15$, $p <$

0.001], the arts [F(8,202) = 2.17, p = 0.031], the sciences [F(8,299) = 3.06, p = 0.003], and administrators [F(8,66) = 5.30, p < 0.001]. The Scheffe post-hoc analyses of each significant one-way ANOVA found significant differences (p < 0.05) between two or more districts only in the analyses of the teachers of the shared subject matters and administrators.

Among teachers of the shared subject matters, those from Dhahirah [mean response (+/- s.d.) = 3.95 (0.65)], Sharqiyah [mean response (+/- s.d.) = 3.91 (0.57)], and Batinah [mean response (+/- s.d.) = 3.86 (0.68)] reported statistically greater agreement and satisfaction with the Omani educational objectives than those from Janoubiyah [mean response (+/- s.d.) = 3.16 (1.08)].

Among administrators, those from Dhahirah [mean response (+/- s.d.) = 4.50 (0.20)] and Musandam [mean response (+/- s.d.) = 4.39 (0.22)] reported statistically greater agreement and satisfaction with the Omani educational objectives than those from Sharqiyah [mean response (+/- s.d.) = 3.52 (0.59)].

2. Process and Practice

Table 31 presents the results obtained from the statistical comparisons of the responses given to items on methods of instruction and student assessment techniques (PROCESSES and PRACTICES) by subjects from each of the nine districts .

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Table 30: Teacher, supervisor, and administrator response to Educational Objective items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
TEACHERS:												
Shared Subject Matters	3.68 (43)	3.86 (45)	3.48 (40)	3.75 (40)	3.91 (34)	3.52 (23)	3.95 (39)	3.15 (39)	3.90 (18)	4.15	8,312	<0.001*
Arts Subjects	4.11 (35)	4.08 (34)	4.14 (24)	4.03 (30)	4.42 (16)	4.04 (16)	4.46 (21)	4.09 (24)	4.03 (11)	2.17	8,202	0.031+
Science Subjects	3.90 (47)	4.06 (48)	4.09 (39)	3.70 (41)	3.73 (27)	3.74 (26)	3.80 (36)	4.09 (36)	4.03 (8)	3.06	8,299	0.003+
SUPERVISORS:												
Shared Subject Matters	2.77 (6)	3.83 (5)	3.53 (3)	3.66 (5)	3.68 (4)	3.96 (3)	3.20 (3)	3.81 (4)	4.13 (2)			
Islamic Education	2.83 (1)	1.31 (1)	1.31 (1)	2.31 (1)	2.20 (2)	1.77 (2)	1.33 (1)	1.83 (2)	1.89 (1)			
Arts Subjects	3.83 (4)	3.60 (3)	4.17 (2)	3.77 (3)	4.29 (3)	4.40 (4)	4.78 (1)	3.15 (4)	---- (0)			
Science Subjects	3.76 (3)	4.13 (6)	3.65 (2)	3.76 (3)	3.91 (2)	3.32 (3)	3.58 (3)	4.15 (5)	4.28 (1)			
ADMINISTRATORS:	3.76 (9)	4.20 (9)	4.23 (8)	4.17 (10)	3.52 (9)	4.14 (9)	4.50 (9)	3.92 (6)	4.39 (6)	5.30	8,66	<0.001**

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = Dhah, Bati, & Shar to differ significantly from Jano; ** = Musa & Dhah to differ significantly from Shar.

The responses given to method of instruction items by teachers of the shared subject matters, the arts, and the sciences and by administrators differed statistically, by one-way ANOVA, as a function of district of employment [shared subject matters $F(8,311) = 4.15$, $p < 0.001$, the arts $F(8,202) = 4.94$, $p < 0.001$, the sciences $F(8,293) = 4.38$, $p < 0.001$, and administrators $F(8,66) = 2.95$, $p = 0.007$]. The Scheffe post-hoc analysis of each significant one-way ANOVA

found significance differences ($p < 0.05$) between two or more districts only in the analyses of the teachers of the shared subject matters, the teachers of the arts, and the teachers of the sciences.

Among teachers of the shared subject matters, those from Dhahirah [mean response (+/- s.d.) = 3.76 (0.71)] differed statistically from those from Janoubiyah [[mean response (+/- s.d.) = 3.02 (0.90)]. While among teachers of the arts, those from Dhahirah [mean response (+/- s.d.) = 4.24 (0.40)] differed statistically from those from Batinah [mean response (+/- s.d.) = 3.28 (0.74)], Roustaq [mean response (+/- s.d.) = 3.29 (0.74)], and Wousta [mean response (+/- s.d.) = 3.26 (0.94)]. Finally, among teachers of the sciences, those from Janoubiyah [mean response (+/- s.d.) = 3.91 (0.56)] differed statistically from those from Wousta [mean response (+/- s.d.) = 3.02 (0.82)].

The responses given to student assessment technique items by teachers of the shared subject matters, the arts, and the sciences and by administrators differed statistically, by one-way ANOVA, as a function of district of employment [shared subject matters $F(8,311) = 5.70$, $p < 0.001$, the arts $F(8,202) = 3.51$, $p < 0.001$, the sciences $F(8,293) = 3.33$, $p = 0.001$, and administrators $F(8,66) = 2.33$, $p = 0.029$]. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significance differences ($p < 0.05$) in the analyses of the teachers of

Table 31: Teacher, supervisor, and administrator response to Classroom Activity items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Methods of Instruction Items												
TEACHERS:												
Shared Subject Matters	3.32 (43)	3.60 (45)	3.27 (40)	3.47 (40)	3.53 (33)	3.15 (23)	3.76 (39)	3.02 (39)	3.71 (18)	4.15	8,311	<0.001*
Arts Subjects	3.58 (34)	3.28 (34)	3.29 (25)	3.66 (30)	3.98 (16)	3.26 (16)	4.24 (21)	3.65 (24)	3.41 (11)	4.94	8,202	<0.001**
Science Subjects	3.36 (47)	3.41 (47)	3.62 (37)	3.46 (41)	3.44 (27)	3.02 (24)	3.48 (36)	3.91 (35)	3.66 (8)	4.38	8,293	<0.001***
SUPERVISORS:												
Shared Subject Matters	3.00 (6)	3.40 (5)	2.64 (3)	3.76 (5)	3.30 (3)	3.82 (3)	3.20 (3)	3.73 (4)	3.73 (2)			
Islamic Education	3.00 (1)	2.45 (1)	1.55 (1)	2.64 (1)	2.36 (2)	2.77 (2)	2.27 (1)	1.82 (2)	1.64 (1)			
Arts Subjects	3.52 (4)	2.88 (3)	4.09 (2)	2.55 (3)	3.76 (3)	3.93 (4)	3.91 (1)	2.80 (4)	---- (0)			
Science Subjects	2.94 (3)	3.93 (6)	3.38 (2)	2.85 (3)	2.85 (2)	3.30 (3)	4.06 (3)	3.75 (5)	3.27 (1)			
ADMINISTRATORS:	3.35 (9)	3.89 (9)	3.92 (8)	3.87 (10)	3.07 (9)	3.62 (9)	4.00 (9)	3.52 (6)	3.79 (6)	2.95	8,66	0.007+
Student Assessment Items												
TEACHERS:												
Shared Subject Matters	3.65 (43)	3.80 (45)	3.32 (40)	3.60 (40)	3.72 (33)	3.30 (23)	3.80 (39)	3.06 (39)	3.67 (18)	5.70	8,311	<0.001****
Arts Subjects	3.84 (34)	3.76 (34)	3.82 (25)	3.91 (30)	4.15 (16)	3.58 (16)	4.29 (21)	3.81 (24)	3.83 (11)	3.51	8,202	<0.001*****
Science Subjects	3.60 (47)	3.73 (47)	3.88 (37)	3.64 (41)	3.72 (27)	3.43 (24)	3.68 (36)	3.96 (35)	3.82 (8)	3.33	8,293	0.001***
SUPERVISORS:												
Shared Subject Matters	3.19 (6)	3.52 (5)	2.53 (3)	3.68 (5)	3.32 (3)	3.91 (3)	3.55 (3)	3.47 (4)	3.60 (2)			
Islamic Education	2.90 (1)	2.32 (1)	1.42 (1)	2.45 (1)	1.92 (2)	2.50 (2)	2.19 (1)	1.77 (2)	1.97 (1)			
Arts Subjects	3.43 (4)	3.21 (3)	4.07 (2)	2.97 (3)	3.35 (3)	4.20 (4)	4.48 (1)	2.91 (4)	---- (0)			
Science Subjects	3.32 (3)	3.88 (6)	3.52 (2)	3.14 (3)	3.30 (2)	3.19 (3)	3.77 (3)	4.06 (5)	3.19 (1)			
ADMINISTRATORS:	3.46 (9)	3.75 (9)	3.86 (8)	3.79 (10)	3.28 (9)	3.64 (9)	4.06 (9)	3.43 (6)	3.73 (6)	2.33	8,66	0.029+

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = Dhah to differ significantly from Jano; ** = Dhah to differ significantly from Bati, Rous, Wous; *** = Jano to differ significantly from Wous; **** = Musc, Bati, Shar, Dhah to differ significantly from Jano; ***** = Dhah to differ significantly from Wous.

the shared subject matters, the teachers of the arts, and the teachers of the sciences only.

Among teachers of the shared subject matters, those from Batinah [mean response (+/- s.d.) = 3.80 (0.54)], Dhahirah [mean response (+/- s.d.) = 3.80 (0.64)], Sharqiyah [mean response (+/- s.d.) = 3.72 (0.47)], and Muscat [mean response (+/- s.d.) = 3.65 (0.56)] differed significantly from those from Janoubiyah [mean response (+/- s.d.) = 3.06 (0.84)]. While among teachers of the arts, those from Dhahirah [mean response (+/- s.d.) = 4.29 (0.41)] differed significantly from those from Wousta [mean response (+/- s.d.) = 3.58 (0.53)]. Finally among teachers of the sciences, those from Janoubiyah [mean response (+/- s.d.) = 3.96 (0.39)] differed significantly from those from Wousta [mean response (+/- s.d.) = 3.43 (0.56)].

3. Resources

Table 32 presents the results obtained from the statistical comparisons of the responses given to items on staff, facilities, textbooks, and the teachers' manuals (RESOURCES) by subject area from each of the nine districts.

The responses given to staff items by teachers of the shared subject matters, arts, and sciences differed statistically, by one-way ANOVA, as a function of district of employment [shared subject matters $F(8,304) = 3.41$, $p < 0.001$, the arts $F(8,201) = 3.73$, $p < 0.001$, the sciences $F(8,293) = 3.35$, $p = 0.001$, and administrators $F(8,66) =$

2.07, p = 0.051]. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significant differences (p < 0.05) between two or more districts only in the analyses of teachers of the shared subject matters and teachers of the arts. Administrator response to staff items did not differ statistically as a function of their district of employment.

Among teachers of the shared subject matters, those from Dhahirah [mean response (+/- s.d.) = 3.72 (0.73)] differed statistically from those from Roustaq [mean response (+/- s.d.) = 3.10 (0.67)]. And among teachers of the arts, those from Dhahirah [mean response (+/- s.d.) = 3.81 (0.71)] differed statistically from those from Batinah [mean response (+/- s.d.) = 2.84 (0.72)].

The responses given to facilities items by teachers of the shared subject matters, arts, and sciences and by administrators differed statistically, by one-way ANOVA, as a function of district of employment [shared subject matters $F(8,304) = 3.17$, $p = 0.002$, the arts $F(8,201) = 6.74$, $p < 0.001$, the sciences $F(8,293) = 3.99$, $p < 0.001$, and administrators $F(8,66) = 2.61$, $p = 0.015$]. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significance differences ($p < 0.05$) between two or more districts only in the analyses of teachers of the shared subject matters, teachers of the arts, and teachers of the sciences.

Among teachers of the shared subject matters, those from Dhahirah [mean response (+/- s.d.) = 3.67 (0.79)] differed statistically from those from Wousta [mean response (+/- s.d.) = 2.87 (0.73)]. While among teachers of the arts, those from Dhahirah [mean response (+/- s.d.) = 3.72 (0.82)] differed statistically from those from Batinah [mean response (+/- s.d.) = 2.39 (0.61)] and Roustaq [mean response (+/- s.d.) = 2.60 (0.79)]. Those teachers of the arts from Janoubiyah [mean response (+/- s.d.) = 3.30 (0.77)] and Muscat [mean response (+/- s.d.) = 3.16 (0.85)] also differed statistically from those teachers of the arts from Batinah. Finally, among teachers of the sciences, those from Janoubiyah [mean response (+/- s.d.) = 3.46 (0.80)] differed statistically from those from Wousta [mean response (+/- s.d.) = 2.67 (0.78)] and Batinah [mean response (+/- s.d.) = 2.71 (0.72)].

The responses given to textbook items by teachers of the shared subject matters and sciences differed statistically, by one-way ANOVA, as a function of district of employment [shared subject matters $F(8,304) = 3.23$, $p = 0.002$ and the sciences $F(8,291) = 3.30$, $p = 0.001$]. The Scheffe post-hoc analysis of each significant one-way ANOVA found no statistically significant differences (at $p < 0.05$) between two or more districts in any case. No statistically significant differences as a function of district of

employment were isolated, by one-way ANOVA, in the analysis of teachers of the arts response to textbook items.

The responses given to teacher's manual items by teachers of the shared subject matters, the arts and the sciences differed statistically, by one-way ANOVA, as a function of district of employment [shared subject matters $F(8,289) = 2.77$, $p = 0.006$, the arts $F(8,198) = 6.14$, $p < 0.001$, and the sciences $F(8,284) = 2.73$, $p = 0.007$]. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significant differences ($p < 0.05$) between two or more districts only in the analysis of teachers of the arts.

Among teachers of the arts, those from Dhahirah [mean response (+/- s.d.) = 3.87 (0.78)] differed statistically from those from Dakhiliyah [mean response (+/- s.d.) = 2.74 (0.93)] and Roustaq [mean response (+/- s.d.) = 2.77 (0.90)]. Teachers of the arts from Muscat [mean response (+/- s.d.) = 3.56 (0.67)] also differed statistically from teachers of the arts from Dakhiliyah.

Table 28: Teacher, supervisor, and administrator responses to Human and Physical Resource, Textbook, and Teacher's Manual items by district of employment.

	DISTRICT											
	Musc $\bar{Y}$ (n)	Bati $\bar{Y}$ (n)	Rous $\bar{Y}$ (n)	Dhak $\bar{Y}$ (n)	Shar $\bar{Y}$ (n)	Wous $\bar{Y}$ (n)	Dhah $\bar{Y}$ (n)	Jano $\bar{Y}$ (n)	Musa $\bar{Y}$ (n)	F	df	p
Human Resources: Staff Items												
TEACHERS:												
Shared Subject Matters	3.31 (42)	3.44 (45)	3.10 (38)	3.36 (39)	3.31 (35)	3.08 (25)	3.78 (36)	3.18 (38)	3.44 (17)	3.41	8,304	<0.001+
Arts Subjects	3.44 (33)	2.84 (34)	3.35 (23)	3.33 (30)	3.81 (16)	3.00 (12)	3.81 (21)	3.42 (24)	3.94 (11)	3.73	8,201	<0.001++
Science Subjects	3.07 (47)	3.08 (49)	3.41 (37)	3.20 (41)	3.20 (27)	2.91 (24)	3.18 (36)	3.43 (35)	3.44 (18)	3.34	8,293	0.001+
SUPERVISORS:												
Shared Subject Matters	2.95 (19)	3.24 (21)	3.00 (21)	3.20 (21)	3.44 (16)	4.00 (13)	3.88 (17)	3.33 (21)	3.83 (12)			
Islamic Education	3.50 (11)	2.20 (11)	1.40 (11)	2.40 (11)	2.60 (10)	2.30 (10)	2.80 (11)	2.17 (12)	2.80 (11)			
Arts Subjects	3.17 (12)	2.77 (13)	3.38 (13)	2.00 (13)	3.67 (12)	3.25 (12)	3.40 (11)	2.50 (12)	---- (0)			
Science Subjects	2.63 (19)	3.20 (20)	2.70 (20)	2.73 (22)	2.84 (19)	3.17 (18)	3.67 (18)	3.21 (19)	3.40 (10)			
ADMINISTRATORS:	3.64 (14)	3.64 (14)	3.31 (13)	3.88 (16)	3.67 (12)	3.78 (9)	3.88 (16)	3.88 (16)	3.34 (6)	2.07	8,66	0.051+
Physical Resources: Equipment, Facilities, and Materials Items												
TEACHERS:												
Shared Subject Matters	3.22 (42)	3.27 (45)	3.10 (38)	3.30 (39)	3.18 (33)	2.87 (23)	3.47 (36)	2.97 (38)	3.44 (17)	3.17	8,304	0.002+++
Arts Subjects	3.16 (33)	2.32 (34)	2.48 (23)	3.03 (30)	3.37 (16)	2.42 (12)	3.28 (21)	3.29 (24)	2.27 (11)	6.74	8,201	<0.001+,++++
Science Subjects	2.27 (47)	2.71 (49)	3.16 (37)	3.07 (41)	3.07 (27)	2.67 (24)	3.03 (36)	3.46 (35)	3.17 (18)	3.99	8,293	<0.001+++++
SUPERVISORS:												
Shared Subject Matters	3.17 (18)	3.31 (21)	2.71 (21)	3.14 (21)	3.21 (14)	4.14 (13)	3.31 (16)	3.18 (22)	3.69 (13)			
Islamic Education	3.08 (11)	3.18 (11)	2.71 (11)	2.64 (11)	2.68 (10)	2.34 (10)	2.73 (11)	1.74 (12)	2.27 (11)			
Arts Subjects	3.04 (12)	3.08 (13)	3.04 (13)	2.92 (13)	3.18 (11)	3.21 (12)	3.33 (11)	2.71 (14)	---- (0)			
Science Subjects	2.73 (19)	3.29 (20)	3.04 (18)	3.04 (19)	3.00 (12)	2.67 (13)	3.67 (18)	3.23 (19)	3.19 (11)			
ADMINISTRATORS:	2.86 (14)	2.86 (14)	3.46 (13)	3.75 (16)	3.15 (13)	3.33 (9)	3.70 (16)	3.16 (16)	3.33 (6)	2.61	8,66	0.015+
Textbook Items												
TEACHERS:												
Shared Subject Matters	3.43 (42)	3.38 (45)	3.26 (38)	3.34 (39)	3.45 (33)	3.13 (23)	3.86 (36)	3.61 (38)	3.47 (17)	3.23	8,304	0.002+
Arts Subjects	3.42 (33)	3.48 (34)	3.43 (23)	3.41 (30)	3.94 (16)	3.46 (13)	4.03 (21)	3.78 (24)	3.45 (11)	1.08	8,197	0.381
Science Subjects	3.23 (46)	3.31 (49)	3.27 (37)	3.40 (41)	3.48 (27)	3.21 (24)	3.67 (36)	3.74 (35)	3.39 (18)	3.30	8,291	0.001+
SUPERVISORS:												
Shared Subject Matters	3.09 (22)	3.47 (21)	2.90 (21)	3.86 (21)	3.79 (14)	4.34 (13)	3.43 (16)	3.83 (21)	3.83 (12)			
Islamic Education	2.84 (11)	2.17 (11)	1.44 (11)	2.80 (11)	2.82 (11)	2.80 (10)	1.74 (11)	1.80 (12)	1.73 (11)			
Arts Subjects	3.71 (14)	3.38 (13)	3.24 (13)	3.35 (13)	4.13 (12)	4.20 (10)	4.00 (11)	2.31 (13)	---- (0)			
Science Subjects	3.84 (19)	3.71 (21)	3.38 (21)	3.37 (19)	3.44 (16)	3.31 (13)	3.73 (15)	3.67 (18)	3.94 (11)			
Teacher's Manual Items												
TEACHERS:												
Shared Subject Matters	3.38 (39)	3.46 (43)	3.21 (38)	3.62 (39)	3.36 (33)	3.26 (23)	3.67 (36)	3.06 (36)	3.72 (17)	2.77	8,289	0.006+
Arts Subjects	3.54 (33)	3.07 (33)	2.77 (22)	2.74 (30)	3.38 (16)	3.20 (13)	3.87 (21)	3.41 (24)	3.73 (11)	6.14	8,198	<0.001+,++++++
Science Subjects	3.08 (48)	3.15 (49)	3.49 (37)	2.84 (41)	3.21 (28)	3.08 (25)	3.81 (36)	3.44 (35)	3.67 (18)	2.73	8,294	0.007+
SUPERVISORS:												
Shared Subject Matters	2.90 (21)	3.40 (21)	2.85 (21)	3.82 (22)	3.54 (13)	4.04 (13)	3.38 (16)	3.44 (21)	3.92 (12)			
Islamic Education	3.17 (11)	2.74 (11)	1.40 (11)	2.81 (11)	2.89 (10)	2.41 (10)	2.68 (11)	2.13 (12)	2.08 (11)			
Arts Subjects	3.29 (14)	2.84 (13)	3.07 (13)	3.01 (13)	2.61 (13)	3.25 (12)	4.00 (11)	2.50 (14)	---- (0)			
Science Subjects	2.44 (18)	3.48 (21)	3.12 (21)	2.73 (22)	3.19 (16)	3.00 (13)	3.54 (15)	3.67 (18)	3.92 (11)			

KEY: Musc = Muscat; Bati = Batinah; Rous = Rousteq; Dhak = Dakhiliyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; + = Dhah to differ significantly from Rous; ++ = Dhah to differ significantly from Bati; +++ = Dhah to differ significantly from Wous; ++++ = Musc, Dhak & Jano to differ significantly from Bati; +++++ = Jano to differ significantly from Bati & Wous; ++++++ = Musc & Dhak to differ significantly from Dhak.

D. Educational Preparation

A global effect of educational preparation was found in its influence on the responses of teachers of the shared subject matters. In contrast, no statistically significant differences as a function of educational preparation were found in the analyses of administrator responses to Theory, Process and Practice, or Resource portions of the questionnaire. The analyses of the effects of educational preparation on supervisor responses to Theory, Process and Practice, and Resources questionnaire items were only possible among supervisors of the shared subject matters of Arabic language and English language, in which 5 supervisors had a university or college degree in education, 5 supervisors had a university or college degree outside of education, and 25 supervisors had obtained a non-university, non-college educational level. Since less than 5 supervisors per response category were available in the arts, sciences, and Islamic Education supervisor samples, no statistical analyses of the effect of educational preparation on the responses of these supervisors were performed. However, the mean responses of supervisors of the arts, supervisors of the sciences, and supervisors of Islamic Education are reported in the tables below by educational preparation.

1. Theory

Table 33 presents the results obtained from the statistical comparisons of the responses given to items on Omani educational objectives (THEORY) by subjects at each educational preparation level.

By one-way ANOVA, statistically significant differences in the response given to Omani educational objectives were found through items assessing the function of educational preparation among teachers of the shared subject matters [$F(2,318) = 21.05$, $p < 0.001$], teachers of the sciences [$F(2,305) = 11.84$, $p < 0.001$], and supervisors of shared subject matters in Arabic and English Languages [$F(2,32) = 3.28$, $p = 0.05$]. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significant differences ($p < 0.05$) between two or more educational levels in both cases.

Among teachers of the shared subject matters, those that obtained a university degree either in education [mean response (+/- s.d.) = 3.82 (0.59)] or outside of education [mean response (+/- s.d.) = 3.88 (0.89)] differed statistically from those that obtained a non-university/college education [mean response (+/- s.d.) = 3.23 (0.78)], in that a university/college education led to greater agreement and/or satisfaction with the Omani educational objectives. A similar pattern of significance was obtained in the post-hoc Scheffe analysis of the

responses given to the Omani educational objective by teachers of the sciences at different levels of educational preparation. Teachers of the sciences who had obtained university or college degree [mean responses (+/- s.d.) of 3.96 (0.54) and 3.90 (0.48) in education and outside of education respectively] reported statistically greater satisfaction and/or agreement with the Omani educational objectives than teachers of the sciences who were <u>not</u> educated at the university or college level [mean response (+/- s.d.) = 3.34 (0.80)].

Table 33: Teacher, supervisor, and administrator response to Educational Objective items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	3.82 (120)	3.88 (114)	3.23 (87)	21.05	2,318	<0.001*
Arts Subjects	4.11 (123)	4.19 (69)	4.16 (19)	<1	2,208	
Science Subjects	3.96 (229)	3.90 (59)	3.34 (20)	11.84	2,305	<0.001*
SUPERVISORS:						
Shared Subject Matters	2.99 (5)	3.12 (5)	3.75 (25)	3.28	2,32	0.050+
Islamic Education	---- (0)	---- (0)	1.88 (12)			
Arts Subjects	---- (0)	---- (0)	3.90 (24)			
Science Subjects	---- (0)	4.42 (1)	3.84 (27)			
ADMINISTRATORS:	4.11 (42)	4.03 (17)	4.09 (4)	<1	2,60	

KEY: COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = coll/univ deg in ed & coll/univ deg not in ed to differ significantly from other^.

Finally, teachers of the arts and administrators did not give statistically different responses to the Omani educational objective items as a function of their educational preparation.

2. Process and Practice

Table 34 presents the results obtained from the statistical comparisons of the responses given to items on the methods of instruction and the student assessment techniques ([PROCESSES and PRACTICES) by subjects at each of the three educational preparation levels.

The analyses, by one-way ANOVA, of the effect of educational preparation on teacher, supervisor, and administrator response to method of instruction items revealed statistically significant differences among teachers of the shared subject matters [$F(2,317) = 8.36$, $p < 0.001$] and teachers of the sciences [$F(2,299) = 3.49$, $p = 0.032$] only. Teachers of the arts, supervisors of the shared subject matters in Arabic and English Languages, and administrators did not give statistically different responses, as a function of their educational preparation, to the methods of instruction items. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significance differences ($p < 0.05$) between two or more educational levels among both teachers of the shared subject matters and teachers of the sciences.

Among teachers of the shared subject matters, those who obtained a university/college degree either in education [mean response (+/- s.d.) = 3.49 (0.66)] or outside of education [mean response (+/- s.d.) = 3.56 (0.82)] differed statistically from those who obtained a non-university/college education [mean response (+/- s.d.) = 3.15 (0.69)]. Those with a university/college education reported greater satisfaction with the method of instruction used in Oman than those without a university/college education. A similar pattern of significance was obtained from the post-hoc Scheffe analysis of the responses by teachers of the sciences to the method of instruction items as a function of their educational preparation. Those teachers of the sciences that obtained a university/college degree in education [mean response (+/- s.d.) = 3.52 (0.63)] reported statistically greater satisfaction with the methods of instruction used in Oman than those teachers of the sciences that did not have a university/college level of education [mean response (+/- s.d.) = 3.11 (0.77)].

The analyses by one-way ANOVA, of the effect of educational preparation on teacher, supervisor, and administrator response to student assessment technique items revealed statistically significant differences among teachers of the shared subject matters [$F(2,317) = 11.49$, $p < 0.001$] and teachers of the sciences [$F(2,299) = 9.87$, $p < 0.001$] only. Teachers of the arts, supervisors of the

shared subject matters in Arabic and English Languages, and administrators did not give statistically different responses to the student assessment technique items as a function of their educational preparation. The Scheffe post-hoc analysis of each significant one-way ANOVA found statistically significant differences ($p < 0.05$) between two or more educational levels among both teachers of the shared subject matters and teachers of the sciences.

Among teachers of the shared subject matters, those who obtained a university/college degree either in education [mean response (+/- s.d.) = 3.66 (0.56)] or outside of education [mean response (+/- s.d.) = 3.67 (0.79)] differed statistically from those that did not have a university/college education [mean response (+/- s.d.) = 3.25 (0.68)]. Those that had a university/college education reported greater satisfaction with the student assessment techniques used at the Secondary school level than those that did not have a university/college education. A similar pattern of significance was obtained from the post-hoc Scheffe analysis of the responses given to student assessment technique items by the teachers of the sciences as a function of their educational preparation. Teachers of the sciences that had a university or college education [mean responses (+/- s.d.) of 3.77 (0.47) and 3.65 (0.46) in education and outside of education respectively] reported statistically greater satisfaction with the student

Table 34: Teacher, supervisor, and administrator response to Classroom Activity items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	X (n)	X (n)	X (n)	F	df	p
Methods of Instruction Items						
TEACHERS:						
Shared Subject Matters	3.49 (120)	3.56 (114)	3.15 (86)	8.36	2,317	<0.001*
Arts Subjects	3.52 (122)	3.63 (69)	3.75 (20)	1.13	2,208	0.326
Science Subjects	3.52 (226)	3.45 (57)	3.11 (19)	3.49	2,299	0.032**
SUPERVISORS:						
Shared Subject Matters	2.87 (5)	3.09 (5)	3.55 (24)	2.37	2,31	0.110
Islamic Education	---- (0)	---- (0)	2.29 (12)			
Arts Subjects	---- (0)	---- (0)	3.36 (24)			
Science Subjects	---- (0)	4.80 (1)	3.43 (27)			
ADMINISTRATORS:	3.69 (42)	3.62 (17)	3.52 (4)	<1	2,60	
Student Assessment Items						
TEACHERS:						
Shared Subject Matters	3.66 (120)	3.67 (114)	3.25 (86)	11.49	2,317	<0.001*
Arts Subjects	3.84 (122)	3.90 (69)	4.05 (20)	1.45	2,208	0.237
Science Subjects	3.77 (226)	3.65 (57)	3.28 (19)	9.87	2,299	<0.001*
SUPERVISORS:						
Shared Subject Matters	2.81 (5)	3.33 (5)	3.56 (24)	3.07	2,31	0.061
Islamic Education	---- (0)	---- (0)	2.14 (12)			
Arts Subjects	---- (0)	---- (0)	3.47 (24)			
Science Subjects	---- (0)	4.33 (1)	3.57 (27)			
ADMINISTRATORS:	3.70 (42)	3.61 (17)	3.65 (4)	<1	2,60	

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = coll/univ deg in ed & coll/univ deg not in ed to differ significantly from other^; ** = coll/univ deg in ed to differ significantly from other^.

assessment techniques used at the Secondary school level than teachers of the sciences that did not have a university/college education [mean response (+/- s.d.) = 3.28 (0.60)].

3. Resources

Table 35 presents the results obtained from the statistical comparisons of the responses given to items on the staff, facilities, textbook, and the teacher's manual (RESOURCES) by subjects at each of the three educational preparation levels.

The analyses, by one-way ANOVA, of the effect of educational preparation on teacher, supervisor, and administrator response to staff items revealed statistically significant differences among teachers of the sciences only [$F(2,299) = 3.34$, $p < 0.037$]. The Scheffe post-hoc comparison of the group differences in this one-way analysis did not reveal specific differences between the three educational levels ($p > 0.05$).

Teachers of the shared subject matters, teachers of the arts, supervisors of the shared subject matters in Arabic and English Languages, and administrators did not give statistically different responses to the staff items as a function of their educational preparation.

The analyses, by one-way ANOVA, of the effect of educational preparation on teacher, supervisor, and

administrator response to facilities items revealed no statistically significant differences.

The analyses, by one-way ANOVA, of the effect of educational preparation on teachers' and supervisors' responses to textbook items revealed statistically significant differences among teachers of the shared subject matters [$F(2,310) = 4.93$, $p = 0.008$] and teachers of the sciences [$F(2,297) = 5.10$, $p = 0.007$] only. The Scheffe post-hoc comparisons of the group differences in these significant analyses revealed significant differences in both cases.

Among teachers of the shared subject matters, those who had received a university/college education outside of field of education [mean response (+/- s.d.) = 3.58 (0.87)], reported significantly greater satisfaction with the textbooks than those that had not possessing a university/college education [mean response (+/- s.d.) = 3.25 (0.68)]. Among teachers of the sciences, those obtaining a university/college education in the field of education [mean response (+/- s.d.) = 3.55 (0.66)] differed slightly but significantly from those that had not obtained a university/college education [mean response (+/- s.d.) = 3.07 (0.87)].

Teachers of the arts and supervisors of the shared subject matters in Arabic and English Languages (shared subject matters) did not give statistically different

Table 28: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook, and Teacher's Manual items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER*			
	T (n)	T (n)	T (n)	F	df	p
Human Resources: Staff Items						
TEACHERS:						
Shared Subject Matters	3.31 (118)	3.40 (114)	3.21 (81)	1.69	2,310	0.186
Arts Subjects	3.33 (122)	3.38 (68)	3.75 (20)	2.16	2,207	0.118
Science Subjects	3.27 (227)	3.11 (56)	2.90 (19)	3.34	2,299	0.037+
SUPERVISORS:						
Shared Subject Matters	3.38 (5)	3.21 (5)	3.50 (25)	<1	2,32	
Islamic Education	---- (0)	---- (0)	2.38 (12)			
Arts Subjects	---- (0)	---- (0)	2.97 (24)			
Science Subjects	---- (0)	4.60 (1)	3.26 (27)			
ADMINISTRATORS:	3.54 (42)	3.48 (17)	3.19 (4)	<1	2,60	
Physical Resources: Equipment, Facilities, and Materials Items						
TEACHERS:						
Shared Subject Matters	3.22 (118)	3.29 (114)	3.15 (81)	<1	2,310	
Arts Subjects	2.91 (122)	3.07 (68)	3.16 (20)	1.10	2,207	0.334
Science Subjects	3.08 (227)	2.98 (56)	2.88 (19)	1.44	2,299	0.240
SUPERVISORS:						
Shared Subject Matters	3.26 (5)	3.19 (5)	3.43 (25)	<1	2,32	
Islamic Education	---- (0)	---- (0)	2.64 (12)			
Arts Subjects	---- (0)	---- (0)	3.01 (24)			
Science Subjects	---- (0)	4.25 (1)	3.22 (27)			
ADMINISTRATORS:	3.42 (42)	3.09 (17)	2.98 (4)	1.64	2,60	0.202
Textbook Items						
TEACHERS:						
Shared Subject Matters	3.47 (118)	3.58 (114)	3.25 (81)	4.93	2,310	0.008e
Arts Subjects	3.64 (120)	3.78 (67)	4.08 (19)	2.56	2,203	0.080
Science Subjects	3.35 (226)	3.40 (56)	3.07 (18)	5.10	2,297	0.007ee
SUPERVISORS:						
Shared Subject Matters	3.48 (5)	3.43 (5)	3.69 (25)	<1	2,32	
Islamic Education	---- (0)	---- (0)	2.03 (12)			
Arts Subjects	---- (0)	---- (0)	3.44 (24)			
Science Subjects	---- (0)	4.17 (1)	3.55 (27)			
Teacher's Manual Items						
TEACHERS:						
Shared Subject Matters	3.38 (115)	3.44 (111)	3.22 (72)	2.20	2,295	0.113
Arts Subjects	3.89 (120)	3.31 (68)	3.18 (19)	<1	2,204	
Science Subjects	3.13 (223)	3.20 (55)	3.02 (13)	<1	2,290	
SUPERVISORS:						
Shared Subject Matters	3.17 (5)	3.30 (5)	3.58 (24)	1.16	2,31	0.326
Islamic Education	---- (0)	---- (0)	2.34 (12)			
Arts Subjects	---- (0)	---- (0)	3.13 (24)			
Science Subjects	---- (0)	4.40 (1)	3.17 (27)			

* Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; e = coll/univ deg not in ed to differ significantly from other; ee = coll/univ deg in ed to differ significantly from other.

responses to textbook items as a function of their educational preparation.

The analyses, by one-way ANOVA, of the effect of educational preparation on teacher and supervisor response to teacher's manual items revealed no statistically significant differences.

E. Amount of in-service training

A global effect of the amount of in-service training was found in the responses given by teachers of the shared subject matters. In all analyses of the responses given to THEORY, PROCESS and PRACTICE, and RESOURCE items by teachers of the shared subject matters, lesser amounts of in-service training were associated with greater amounts of satisfaction with the Omani curriculum at the Secondary level. Among administrators, no statistically significant differences in the responses given to Theory, Process and Practice, or Resource questionnaire sections were found as a function of the amount of in-service training they had received. An analysis of the effects of amount of in-service training on supervisor response was possible among supervisors of the sciences only, in which 5 supervisors reported that they had no in-service training and 22 reported that they had 1 to 2 years of in-service training (1 reported that they had less than 1 month or 1 to 3 months of in-service training). The comparison of those supervisors of the sciences who had either no in-service

training or 1 to 2 years of in-service training are reported below. Less than 5 supervisors per response category were available in the shared subject matters, the arts, and the Islamic Education areas, thus, no statistical analyses of the effect of amount of in-service training on these supervisor groups were performed. However, the mean responses given by supervisors of the shared subject matters in Arabic and English Languages, supervisors of the arts, and supervisors of Islamic Education by the amount of in-service training they received are reported in the tables below.

1. Theory

Table 36 presents the results obtained from the statistical comparisons of the responses given to items on Omani educational objectives (THEORY) by subjects who had spent different amounts of time in in-service training.

By one-way ANOVA, statistically significant differences in the responses given to Omani educational objective items as a function of amount of in-service training were found among teachers of the shared subject matters [$F(3,317) = 22.61$, $p < 0.001$] and teachers of the sciences [$F(3,304) = 6.15$, $p < 0.001$]. Teachers of the arts, supervisors of the sciences, and administrators did not give statistically different responses to the Omani educational objective items as a function of the amount of in-service training they had received. The Scheffe post-hoc analysis of each significant

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one-way ANOVA found statistically significance differences($p < 0.05$) between two or more levels of the amount of in-service training among both teachers of the shared subject matters and teachers of the sciences.

Among teachers of the shared subject matters, those attending no in-service training [mean response (+/- s.d.) = 4.00 (0.55)] or less than 3 months of in-service training [mean response (+/- s.d.) = 3.90 (0.67)] reported statistically greater agreement or satisfaction with the Omani educational objectives than those that attended 4 to 12 months of in-service training [mean response (+/- s.d.) = 3.23 (0.66)] or 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.20 (0.94)].

Among teachers of the sciences, those attending no in-service training [mean response (+/- s.d.) = 3.93 (0.63)], less than 3 months of in-service training [mean response (+/- s.d.) = 3.94 (0.52)], or 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.98 (0.51)] reported statistically greater agreement or satisfaction with the Omani educational objectives than those that attended 4 to 12 months of in-service training [mean response (+/- s.d.) = 3.37 (0.79)].

2. Process and Practice

Table 37 presents the results obtained from the statistical comparisons of the responses given to methods of instruction and student assessment techniques (PROCESSES and

PRACTICES) by subjects who had spent different amounts of time in in-service training.

Table 36: Teacher, supervisor, and administrator response to Educational Objective items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
TEACHERS:							
Shared Subject Matters	4.00 (44)	3.90 (170)	3.23 (25)	3.20 (82)	22.61	3,317	<0.001*
Arts Subjects	4.08 (27)	4.13 (151)	4.16 (9)	4.31 (24)	<1	3,207	
Science Subjects	3.93 (51)	3.94 (203)	3.37 (18)	3.98 (36)	6.15	3,304	<0.001**
SUPERVISORS:							
Shared Subject Matters	---- (0)	3.39 (3)	3.83 (3)	3.54 (29)			
Islamic Education	2.28 (1)	---- (0)	---- (0)	1.84 (11)			
Arts Subjects	4.42 (2)	---- (0)	---- (0)	3.85 (22)			
Science Subjects	3.80 (5)	4.42 (1)	---- (0)	3.85 (22)	<1	2,25	
ADMINISTRATORS:	4.28 (6)	4.15 (28)	4.07 (18)	3.99 (21)	<1	3,69	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = <0 month, >0-3 months to differ significantly from 4-12 months and 1-2 years; ** = <0 month, >0-3 months & 1-2 years to differ significantly from 4-12 months.

Statistically significant differences, by one-way ANOVA, in the mean responses given to methods of instruction items as a function of the amount of in-service training were found among teachers of the shared subject matters [$F(3,316) = 9.98$, $p < 0.001$] and teachers of the arts [$F(3,207) = 5.67$, $p < 0.001$]. The responses given to method

of instruction items by teachers of the sciences, supervisors of the sciences, and administrators did not differ statistically as a function of the amount of time spent in in-service training. The Scheffe post-hoc analysis of each significant one-way ANOVA listed above found statistical significance differences ($p < 0.05$) between two or more levels of in-service training in all cases.

Among teachers of the shared subject matters, those who attended no in-service training [mean response (+/- s.d.) = 3.48 (0.68)] or less than 3 months of in-service training [mean response (+/- s.d.) = 3.59 (0.69)] differed statistically, reporting greater satisfaction with the method of instruction used at the Secondary school level than those teachers of the shared subject matters who attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.07 (0.78)].

Among teachers of the arts, those who attended less than three months of in-service training [mean response (+/- s.d.) = 3.60 (0.71)], 4 to 12 months of in-service training [mean response (+/- s.d.) = 3.94 (0.59)], or 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.85 (0.61)] reported statistically greater satisfaction with the method of instruction used in the Secondary school level than those teachers of the arts that attended no in-service training [mean response (+/- s.d.) = 3.11 (0.90)].

Statistically significant differences in the mean responses given to student assessment technique items as a function of the amount of in-service training were found among teachers of the shared subject matters [$F(3,316) = 21.78$, $p < 0.001$] and teachers of the sciences [$F(3,298) = 2.68$, $p = 0.047$]. Teachers of the arts, supervisors of the sciences, and administrators did <u>not</u> give statistically different responses to student assessment technique items as a function of the amount of in-service training they had taken. The Scheffe post-hoc analysis of the significant one-way ANOVA reported above found statistically significance differences ($p < 0.05$) between two or more levels of in-service training in only the analysis of teachers of the shared subject matters.

Among teachers of the shared subject matters, those attending no in-service training [mean response (+/- s.d.) = 3.77 (0.50)], or less than 3 months of in-service training [mean response (+/- s.d.) = 3.74 (0.60)] reported statistically greater satisfaction with the student assessment techniques used in the Omani secondary school than those teachers of the shared subject matters that attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.08 (0.78)].

Table 37: Teacher, supervisor, and administrator response to Classroom Activity items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Methods of Instruction Items							
TEACHERS:							
Shared Subject Matters	3.48 (43)	3.59 (170)	3.31 (25)	3.07 (82)	9.98	3,316	<0.001*
Arts Subjects	3.11 (27)	3.60 (150)	3.94 (9)	3.85 (25)	5.67	3,207	<0.001**
Science Subjects	3.48 (50)	3.50 (199)	3.31 (18)	3.44 (35)	<1	3,298	
SUPERVISORS:							
Shared Subject Matters	---- (0)	2.97 (3)	3.79 (3)	3.39 (28)			
Islamic Education	2.45 (1)	---- (0)	---- (0)	2.27 (11)			
Arts Subjects	3.95 (2)	---- (0)	---- (0)	3.31 (22)			
Science Subjects	3.05 (5)	4.80 (1)	---- (0)	3.52 (22)	2.98	2,25	0.069
ADMINISTRATORS:	3.76 (6)	3.71 (28)	3.55 (18)	3.71 (21)	<1	3,69	
Student Assessment Items							
TEACHERS:							
Shared Subject Matters	3.77 (43)	3.74 (170)	3.45 (25)	3.08 (82)	21.78	3,316	<0.001*
Arts Subjects	3.74 (27)	3.89 (150)	3.91 (9)	3.99 (25)	<1	3,207	
Science Subjects	3.66 (50)	3.75 (199)	3.43 (18)	3.72 (35)	2.68	3,298	0.047+
SUPERVISORS:							
Shared Subject Matters	---- (0)	3.01 (3)	3.85 (3)	3.41 (28)			
Islamic Education	1.68 (1)	---- (0)	---- (0)	2.18 (11)			
Arts Subjects	4.15 (2)	---- (0)	---- (0)	3.41 (22)			
Science Subjects	3.45 (5)	4.33 (1)	---- (0)	3.59 (22)	1.03	2,25	0.371
ADMINISTRATORS:	3.91 (6)	3.71 (28)	3.53 (18)	3.70 (21)	1.06	3,69	0.370

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = <0 month & >0-3 months to differ significantly from 1-2 years; ** = >0-3 months, 4-12 months & 1-2 years to differ significantly from <0 month.

3. Resources

Table 38 presents the results obtained from the statistical comparisons of the responses given to items on the staff, facilities, textbooks, and teachers manual resources (RESOURCES) by subjects who had spent different amounts of time in in-service training.

The mean responses given to staff items differed statistically, by one-way ANOVA, as a function of the length of in-service training among teachers of the shared subject matters [$F(3,309) = 4.92$, $p = 0.002$] and supervisors of the sciences [$F(2,25) = 3.57$, $p = 0.043$]. The responses given to staff items by teachers of the arts, teachers of the sciences, and administrators did not differ statistically as a function of the amount of in-service training they had taken. The Scheffe post-hoc analysis of the significant one-way ANOVA's reported above found statistically significance differences ($p < 0.05$) between two or more levels of in-service training time in the analysis of the teachers of the shared subject matters case only.

Among teachers of the shared subject matters, those that attended some in-service training but less than 3 months in total [mean response (+/- s.d.) = 3.44 (0.68)] reported statistically greater satisfaction with the staff than those that attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.09 (0.74)].

The mean responses given to facility items differed statistically, by one-way ANOVA, as a function of the amount of in-service training obtained by teachers of the shared subject matters [$F(3,309) = 3.09$, $p = 0.027$] and supervisors of the sciences [$F(2,25) = 5.35$, $p = 0.012$]. The responses to facility items by teachers of the arts, teachers of the sciences, and administrators did not differ statistically as a function of the amount of in-service training these educators had taken. The Scheffe post-hoc analysis of significant one-way ANOVA's reported above found statistically significance differences ($p < 0.05$) between two or more levels of in-service training time within the sample of supervisors in the sciences only.

Among supervisors of the sciences, those that attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.37 (0.62)] reported statistically greater satisfaction with the facilities than those that attended no in-service training [mean response (+/- s.d.) = 2.56 (0.33].

The mean responses given to textbook items differed statistically as a function of the amount of in-service training taken by teachers of shared subject matters [$F(3,309) = 7.70$, $p = 0.001$] only. The responses given to textbook items by teachers of the arts, teachers of the sciences, and supervisors of the sciences did not differ statistically as a function of the amount of in-service training they had taken. The Scheffe post-hoc analysis of

the significant one-way ANOVA given above did find statistically significance differences ($p < 0.05$) between two or more levels of in-service training time.

Among teachers of the shared subject matters, those that attended no in-service training [mean response (+/- s.d.) = 3.58 (0.73)] less than 3 months of in-service training [mean response (+/- s.d.) = 3.60 (0.70)] reported statistically greater satisfaction with the textbooks than those that attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.15 (0.76)].

The mean responses given to teacher's manual items differed statistically as a function of the amount of in-service training obtained by teachers of the shared subject matters [$F(3,294) = 5.70$ $p < 0.001$] and supervisors of the sciences [$F(2,25) = 8.68$, $p = 0.001$]. The responses given to teachers' manual items by teachers of the arts, and teachers of the sciences did <u>not</u> differ statistically as a function of the amount of in-service training which they had obtained. The Scheffe post-hoc analysis of the significant one-way ANOVA reported above found statistically significant differences ($p < 0.05$) between two or more levels of in-service training in both cases.

Among teachers of the shared subject matters, those that attended some in-service training but less than 3 months in-service training [mean response (+/- s.d.) = 3.46 (0.69)] reported statistically greater satisfaction with the

teacher's manual than those that attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.08 (0.64)].

Table 39: Teacher, supervisor, and administrator response to human and physical resources, textbook, and teacher's manual items by amount of in-service training.

	0 months (n)	1-3 months (n)	4-11 months (n)	1-2 years (n)	F	df	p
Human Resources: Staff Items							
TEACHERS:							
Shared Subject Matters	3.38 (43)	3.44 (168)	3.27 (23)	3.09 (88)	4.98	3,309	0.002*
Arts Subjects	3.04 (27)	3.38 (149)	3.33 (9)	3.33 (25)	<1	3,206	
Science Subjects	3.00 (49)	3.04 (199)	3.10 (10)	3.00 (36)	<1	3,298	
SUPERVISORS:							
Shared Subject Matters	---- (0)	2.00 (3)	3.00 (3)	3.47 (29)			
Islamic Education	2.40 (1)	---- (0)	---- (0)	2.27 (11)			
Arts Subjects	3.00 (2)	---- (0)	---- (0)	2.91 (22)			
Science Subjects	2.75 (5)	4.00 (1)	---- (0)	3.36 (22)	3.57	2,25	0.043*
ADMINISTRATORS:	3.83 (6)	3.63 (28)	3.88 (18)	3.90 (21)	2.54	3,69	0.064
Physical Resources: Equipment, Facilities, and Materials Items							
TEACHERS:							
Shared Subject Matters	3.43 (43)	3.29 (165)	3.04 (23)	3.08 (88)	3.09	3,309	0.027*
Arts Subjects	2.96 (27)	2.98 (149)	3.19 (9)	3.08 (25)	<1	3,206	
Science Subjects	3.00 (49)	3.08 (199)	3.00 (10)	3.19 (36)	<1	3,298	
SUPERVISORS:							
Shared Subject Matters	---- (0)	3.00 (3)	3.70 (3)	3.37 (29)			
Islamic Education	2.65 (1)	---- (0)	---- (0)	2.64 (11)			
Arts Subjects	3.68 (2)	---- (0)	---- (0)	2.95 (22)			
Science Subjects	2.56 (5)	4.00 (1)	---- (0)	3.37 (22)	5.35	2,25	0.012**
ADMINISTRATORS:	3.44 (6)	3.43 (28)	3.00 (18)	3.10 (21)	<1	3,69	
Textbook Items							
TEACHERS:							
Shared Subject Matters	3.58 (43)	3.40 (165)	3.27 (23)	3.15 (88)	7.70	3,309	<0.001***
Arts Subjects	3.56 (27)	3.70 (144)	3.56 (9)	3.92 (24)	1.47	3,202	0.225
Science Subjects	3.50 (49)	3.51 (197)	3.81 (10)	3.48 (36)	1.14	3,296	0.332
SUPERVISORS:							
Shared Subject Matters	---- (0)	3.37 (3)	3.44 (3)	3.64 (29)			
Islamic Education	1.78 (1)	---- (0)	---- (0)	2.06 (11)			
Arts Subjects	4.14 (2)	---- (0)	---- (0)	3.37 (22)			
Science Subjects	3.88 (5)	4.17 (1)	---- (0)	3.68 (22)	2.42	2,25	0.109
Teacher's Manual Items							
TEACHERS:							
Shared Subject Matters	3.37 (43)	3.49 (158)	3.33 (17)	3.06 (80)	5.70	3,294	<0.001*
Arts Subjects	3.89 (27)	3.88 (147)	3.48 (9)	3.65 (24)	1.79	3,203	0.151
Science Subjects	3.17 (48)	3.18 (194)	3.06 (15)	3.19 (34)	<1	3,289	
SUPERVISORS:							
Shared Subject Matters	---- (0)	3.3 (2)	3.9 (3)	3.45 (29)			
Islamic Education	2.07 (1)	---- (0)	---- (0)	2.37 (11)			
Arts Subjects	3.99 (2)	---- (0)	---- (0)	3.05 (22)			
Science Subjects	2.48 (5)	4.40 (1)	---- (0)	3.33 (22)	8.68	2,25	0.001***

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
The Scheffe pairwise comparison of the group means showed: * = no two groups to be significantly different; ** = 10-2 months to differ significantly from 1-3 months; 1-3 months to differ significantly from 4-11 months; and *** = <0 months & 10-2 months to differ significantly from 1-2 years.

Among supervisors of the sciences, those that attended 1 to 2 years of in-service training [mean response (+/- s.d.) = 3.33 (0.43)] reported statistically greater satisfaction with the teacher's manual than those that attended no in-service training [mean response (+/- s.d.) = 2.48 (0.79)].

F. Location of in-service training

The effect of location of in-service training on the teachers, supervisors, or administrators response to questionnaire items on THEORY, PROCESS and PRACTICE, and RESOURCES was minor. Statistical analysis could be performed on all three educator groups because that the number of subjects trained inside or outside of Oman always exceed 5 per subject area group.

1. Theory

Table 39 presents the results obtained from the statistical comparisons of the responses given to Omani educational objectives (THEORY) by subjects that had in-service training either inside or outside of Oman.

By one-way ANOVA, statistically significant differences in the responses given to Omani educational objective items as a function of location of in-service training were found among teachers of the shared subject matters [$F(1,319) = 6.59$, $p = 0.011$] and supervisors of the shared subject matters in Arabic and English Languages [$F(1,33) = 7.24$, $p < 0.011$]. Teachers of the arts, teachers of the sciences,

supervisors of the arts, supervisors of the sciences, Islamic Education supervisors, and administrators did not give statistically different response to the Omani educational objective items as a function of the location of their in-service training.

Among teachers of the shared subject matters, those trained outside of Oman [mean response (+/- s.d.) = 3.76 (0.74)] reported statistically greater agreement or satisfaction with the Omani Educational objectives than those that trained inside of Oman [mean response (+/- s.d.) = 3.51 (0.93)].

Among shared subject matters supervisors, those that trained inside of Oman [mean response (+/- s.d.) = 3.87 (0.71)] reported statistically greater satisfaction or agreement with the Omani educational objectives than those trained outside of Oman [mean response (+/- s.d.) = 3.22 (0.72)].

2. Process and Practice

Table 40 presents the results obtained from the statistical comparisons of the responses given to items on the methods of instruction or student assessment techniques (PROCESSES and PRACTICES) by subjects that had in-service training either inside or outside of Oman.

Table 39: Teacher, supervisor, and administrator response to Educational Objective items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
TEACHERS:					
Shared Subject Matters	3.51 (96)	3.76 (225)	6.59	1,319	0.011*
Arts Subjects	4.04 (40)	4.17 (171)	2.18	1,209	0.142
Science Subjects	3.86 (68)	3.92 (240)	<1	1,306	
SUPERVISORS:					
Shared Subject Matters	3.87 (18)	3.22 (17)	7.24	1,33	0.011*
Islamic Education	1.86 (8)	1.92 (4)			
Arts Subjects	3.94 (20)	3.72 (4)			
Science Subjects	3.71 (17)	4.10 (11)	3.39	1,26	0.077
ADMINISTRATORS:	3.99 (21)	4.10 (45)	<1	1,64	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significantly

The responses given to methods of instruction items by supervisors of the shared subject matters in Arabic and English Languages differed statistically as a function of the location of their in-service training [$F(1,32) = 4.90$, $p < 0.034$]. The responses given to methods of instruction items by teachers of the shared subject matters, teachers of the arts, teachers of the sciences, supervisors of the arts, supervisors of the sciences, Islamic Education supervisors,

and administrators did not differ statistically as a function of the location of their in-service training.

Among supervisors of the shared subject matters in Arabic and English Languages, those trained inside of Oman [mean responses (+/- s.d.) = 3.65 (0.77)] reported statistically greater satisfaction with the methods of instruction used at the Secondary School level than those that were trained outside of Oman [mean response (+/- s.d.) = 3.12 (0.63)].

The responses given to student assessment techniques items by supervisors of the shared subject matters in Arabic and English Languages differed statistically as a function of the location of their in-service training [$F(1,32) = 9.46$, $p = 0.004$]. The responses given to student assessment technique items by teachers of the shared subject matters, teachers of the arts, teachers of the sciences, supervisors of the arts, sciences supervisors, Islamic Education supervisors, and administrators did not differ statistically as a function of the location of their in-service training.

Among supervisors of the shared subject matters in Arabic and English Languages, those that were trained inside of Oman [mean responses (+/- s.d.) = 3.72 (0.72)] reported statistically greater satisfaction with the student assessment techniques used at the Secondary school level than those that were trained outside of Oman [mean response (+/- s.d.) = 3.11 (0.42)].

Table 40: Teacher, supervisor, and administrator response to Classroom Activity items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Methods of Instruction Items					
TEACHERS:					
Shared Subject Matters	3.38 (96)	3.44 (224)	<1	1,318	
Arts Subjects	3.56 (40)	3.58 (171)	<1	1,209	
Science Subjects	3.42 (68)	3.50 (234)	<1	1,300	
SUPERVISORS:					
Shared Subject Matters	3.65 (17)	3.12 (17)	4.90	1,32	0.034*
Islamic Education	2.08 (8)	2.70 (4)			
Arts Subjects	3.40 (20)	3.16 (4)			
Science Subjects	3.46 (17)	3.52 (11)	<1	1,26	
ADMINISTRATORS:	3.71 (21)	3.63 (45)	<1	1,64	
Student Assessment Items					
TEACHERS:					
Shared Subject Matters	3.48 (96)	3.58 (224)	1.46	1,318	0.227
Arts Subjects	3.81 (40)	3.90 (171)	<1	1,209	
Science Subjects	3.70 (68)	3.72 (234)	<1	1,300	
SUPERVISORS:					
Shared Subject Matters	3.72 (17)	3.11 (17)	9.46	1,32	0.004*
Islamic Education	1.94 (8)	2.52 (4)			
Arts Subjects	3.50 (20)	3.36 (4)			
Science Subjects	3.59 (17)	3.60 (11)	<1	1,26	
ADMINISTRATORS:	3.70 (21)	3.63 (45)	<1	1,64	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significantly

3. Resources

Table 41 presents the results obtained from the statistical comparisons of the responses given to items on the staff, facilities, textbooks, and teachers' manual (RESOURCES) by subjects that had had their in-service training either inside or outside of Oman.

Location of in-service training did not effect the response given to staff, facilities, and teacher's manual items by any educator group. The effect of location of in-service training on the responses given to textbook items was limited to teachers of the shared subject matters only [$F(1,311) = 7.23$, $p < 0.008$]. Among this subject area group, those trained outside of Oman [mean response (+/- s.d.) = 3.52 (0.72)], reported a slightly greater level of satisfaction with the textbook items than those trained inside of Oman [mean response (+/- s.d.) = 3.28 (0.78)].

G. Workshop attendance

Workshop attendance did not affect administrator response to questionnaire items in any systematic way. Among teachers and supervisors, however, workshop attendance did differentiate the subjects' responses statistically.

Table 41. Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook & Teacher's Manual Items by location of in-service training.

	LOCATION				
	In Oman $\bar{x}$ (n)	Outside Oman $\bar{x}$ (n)	F	df	p
Human Resources Staff Items					
TEACHERS:					
Shared Subject Matters	3.24 (91)	3.34 (222)	1.34	1,311	0.247
Arts Subjects	3.24 (40)	3.42 (170)	1.44	1,208	0.231
Science Subjects	3.22 (68)	3.22 (234)	<1	1,300	
SUPERVISORS:					
Shared Subject Matters	3.48 (18)	3.40 (17)	<1	1,33	
Islamic Education	2.23 (8)	2.68 (4)			
Arts Subjects	2.94 (20)	3.03 (4)			
Science Subjects	3.34 (17)	3.27 (11)	<1	1,26	
ADMINISTRATORS:	3.50 (21)	3.48 (45)	<1	1,64	
Physical Resources: Equipment, Facilities, and Materials Items					
TEACHERS:					
Shared Subject Matters	3.18 (91)	3.25 (222)	<1	1,311	
Arts Subjects	2.99 (40)	2.99 (170)	<1	1,208	
Science Subjects	3.09 (68)	3.05 (234)	<1	1,300	
SUPERVISORS:					
Shared Subject Matters	3.48 (18)	3.25 (17)	<1	1,33	
Islamic Education	2.43 (8)	3.04 (4)			
Arts Subjects	2.94 (20)	3.35 (4)			
Science Subjects	3.21 (17)	3.33 (11)	<1	1,26	
ADMINISTRATORS:	3.18 (21)	3.37 (45)	1.14	1,64	0.289
Textbook Items					
TEACHERS:					
Shared Subject Matters	3.28 (91)	3.52 (222)	7.23	1,311	0.008*
Arts Subjects	3.60 (38)	3.72 (168)	<1	1,204	
Science Subjects	3.52 (67)	3.48 (233)	<1	1,298	
SUPERVISORS:					
Shared Subject Matters	3.70 (18)	3.53 (17)	<1	1,33	
Islamic Education	1.90 (8)	2.30 (4)			
Arts Subjects	3.42 (20)	3.52 (4)			
Science Subjects	3.47 (17)	3.73 (11)	1.91	1,26	0.178
Teacher's Manual Items					
TEACHERS:					
Shared Subject Matters	3.30 (84)	3.35 (214)	<1	1,296	
Arts Subjects	3.24 (38)	3.30 (169)	<1	1,205	
Science Subjects	3.09 (64)	3.15 (229)	<1	1,291	
SUPERVISORS:					
Shared Subject Matters	3.64 (17)	3.32 (17)	2.45	1,32	0.127
Islamic Education	2.21 (8)	2.60 (4)			
Arts Subjects	3.14 (20)	3.07 (4)			
Science Subjects	3.19 (17)	3.24 (11)	<1	1,26	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Statistical analyses were performed on teacher, administrator, and supervisor (shared subject matters in Arabic and English Languages only) groups, since in these groups the number of subjects falling into 2 or more levels of the workshop attendance categories always exceed five. Fewer than 5 supervisors per response category were available from the Islamic Education, the arts, and the sciences subject matter areas; thus, no statistical analyses of the effect of workshop attendance on these supervisor groups were performed. However, the mean responses given by these supervisors are reported in the tables below by the number of workshops which they attended.

1. Theory

Table 42 presents the results obtained from the statistical comparisons of the responses given to items on the Omani educational objectives (THEORY) by subjects that differed in the number of workshops they had attended.

By one-way ANOVA, statistically significant differences in the responses given to Omani educational objective items as a function of the workshop attendance were found among teachers of the shared subject matters [$F(4,316) = 4.11$, $p = 0.003$] and supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 5.19$, $p = 0.011$]. The responses given to the Omani educational objectives by teachers of the arts, teachers of the sciences, and administrators did not differ statistically as a function of

the number of workshops they attended. The Scheffe post-hoc pairwise comparison of the group means of the significant one-way ANOVA's reported above found statistically significant group differences in the teachers of the shared subject matters analysis only.

Table 42: Teacher, supervisor, and administrator response to Educational Objective items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
TEACHERS:								
Shared Subject Matters	3.70 (80)	3.93 (57)	3.91 (44)	3.52 (39)	3.50 (101)	4.11	4,316	0.003*
Arts Subjects	4.18 (54)	4.10 (53)	4.03 (38)	4.22 (36)	4.22 (30)	<1	4,206	
Science Subjects	3.86 (48)	3.93 (54)	4.01 (89)	3.85 (51)	3.84 (66)	1.16	4,303	0.328
SUPERVISORS:								
Shared Subject Matters	3.89 (17)	---- (0)	2.14 (1)	---- (0)	3.30 (17)	5.19	2,32	0.011+
Islamic Education	1.93 (11)	---- (0)	---- (0)	---- (0)	1.31 (1)			
Arts Subjects	3.90 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.84 (27)	---- (0)	4.42 (1)	---- (0)	---- (0)			
ADMINISTRATORS:	4.09 (33)	4.01 (11)	4.06 (5)	4.09 (5)	---- (0)	<1	3,50	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = 1 workshop to differ significantly from >3 workshops.

Among teachers of the shared subject matters, those attending one workshop [mean response (+/- s.d.) = 3.93 (0.68)] reported slightly higher and statistically greater satisfaction or agreement with the Omani educational objectives than those attending more than 3 workshops [mean response (+/- s.d.) = 3.50 (0.63)].

2. Process and Practice

Table 43 presents the results obtained from the statistical comparisons of the responses given to items on the methods of instruction and student assessment techniques (PROCESSES and PRACTICES) by subjects that differed in the number of workshops they had attended.

Statistically significant differences in the responses given to methods of instruction items as a function of the workshop attendance were found, using one-way ANOVA, among teachers of the shared subject matters [$F(4,315) = 4.07$, $p = 0.003$], teachers of the sciences [$F(4,297) = 2.43$, $p = 0.048$], and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 5.88$, $p = 0.007$]. The responses given to method of instruction items by teachers of the arts and administrators did not differ statistically as a function of the number of workshops they had attended. The Scheffe post-hoc pairwise comparison of the group means in the significant analyses reported above found statistically significant group differences ($p < 0.05$) in only the teachers of the shared subject matters and

the supervisors of the shared subject matters in Arabic and English Languages analyses.

Among teachers of the shared subject matters, those attending one workshop [mean response (+/- s.d.) = 3.72 (0.69)] reported statistically greater satisfaction with the methods of instruction used in Oman than those attending more than 3 workshops [mean response (+/- s.d.) = 3.27 (0.62)].

Among supervisors of the shared subject matters in Arabic and English Languages, those attending no workshops [mean response (+/- s.d.) = 3.75 (0.74)] reported statistically greater satisfaction or agreement with the methods of instruction used in Oman than those attending more than 3 workshops [mean response (+/- s.d.) = 3.12 (0.56)].

Statistically significant differences in the responses given to student assessment techniques items as a function of workshop attendance were found using one-way ANOVA, among teachers of the shared subject matters [$F(4,315) = 4.61$, $p = 0.001$], teachers of the sciences [$F(4,297) = 3.22$, $p = 0.013$], and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 7.44$, $p = 0.002$]. The responses given to student assessment technique items by teachers of the arts and administrators did <u>not</u> differ statistically as a function of the number of workshops they had attended. The Scheffe post-hoc pairwise comparison of

the group means in the statistical analyses reported above found statistically significant ($p < 0.05$) group differences in all cases.

Among teachers of the shared subject matters, those attending one workshop [mean response (+/- s.d.) = 3.80 (0.64)] reported slightly higher but statistically greater satisfaction with the student assessment techniques used at the Secondary school level than those attending more than 3 workshops [mean response (+/- s.d.) = 3.41 (0.51)].

Among teachers of the sciences, those attending two workshops [mean response (+/- s.d.) = 3.83 (0.48)] reported slightly, but statistically greater satisfaction with the student assessment techniques than those attending no workshops [mean response (+/- s.d.) = 3.54 (0.46)].

Among supervisors of the shared subject matters in Arabic an English languages, those attending no workshops [mean response (+/- s.d.) = 3.80 (0.70)] reported statistically greater satisfaction or agreement with the student assessment techniques than those attending more than 3 workshops [mean response (+/- s.d.) = 3.07 (0.37)].

Table 43: Teacher, supervisor, and administrator response to Classroom Activity items by number of workshops attended.

	NUMBER							
	0 $\bar{x}$ (n)	1 $\bar{x}$ (n)	2 $\bar{x}$ (n)	3 $\bar{x}$ (n)	>3 $\bar{x}$ (n)	F	df	p
Methods of Instruction Items								
TEACHERS:								
Shared Subject Matters	3.39 (79)	3.72 (56)	3.56 (44)	3.28 (39)	3.27 (102)	4.07	4,315	0.003*
Arts Subjects	3.48 (55)	3.51 (52)	3.63 (38)	3.74 (36)	3.62 (30)	<1	4,206	
Science Subjects	3.27 (47)	3.53 (52)	3.61 (89)	3.43 (51)	3.45 (63)	2.43	4,297	0.048+
SUPERVISORS:								
Shared Subject Matters	3.75 (16)	---- (0)	2.09 (1)	---- (0)	3.12 (17)	5.88	2,31	0.007**
Islamic Education	2.27 (11)	---- (0)	---- (0)	---- (0)	2.45 (1)			
Arts Subjects	3.36 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.43 (27)	---- (0)	4.80 (1)	---- (0)	---- (0)			
ADMINISTRATORS:	3.83 (33)	3.52 (11)	3.78 (5)	3.41 (5)	---- (0)	1.48	3,50	0.232
Student Assessment Items								
TEACHERS:								
Shared Subject Matters	3.55 (79)	3.80 (56)	3.74 (44)	3.36 (39)	3.41 (102)	4.61	4,315	0.001*
Arts Subjects	3.85 (55)	3.82 (52)	3.85 (38)	3.99 (36)	3.95 (30)	<1	4,206	
Science Subjects	3.54 (47)	3.75 (52)	3.83 (89)	3.69 (51)	3.67 (63)	3.22	4,297	0.013***
SUPERVISORS:								
Shared Subject Matters	3.80 (16)	---- (0)	3.03 (1)	---- (0)	3.07 (17)	7.44	2,31	0.002**
Islamic Education	2.12 (11)	---- (0)	---- (0)	---- (0)	2.32 (1)			
Arts Subjects	3.47 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.57 (27)	---- (0)	4.33 (1)	---- (0)	---- (0)			
ADMINISTRATORS:	3.75 (33)	3.55 (11)	3.83 (5)	3.50 (5)	---- (0)	<1	3,50	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = 1 workshop to differ significantly from >3 workshops; ** = 0 workshops to differ significantly from >3 workshops; *** = 2 workshops to differ significantly from 0 workshops.

3. Resources

Table 44 presents the results obtained from the statistical comparisons of the responses given to items on staff, facilities, textbooks, and teacher's manual (RESOURCES) by subjects that differed in the number of workshops they had attended.

Statistically significant differences in the responses given to staff items as a function of the workshop attendance were found, using one-way ANOVA, among teachers of the arts [$F(4,205) = 3.79$, $p = 0.005$] and teachers of the sciences [$F(4,297) = 2.84$, $p = 0.025$]. The responses given to staff items by teachers of the shared subject matters, supervisors of shared subject matters in Arabic and English Languages, and administrators did not differ statistically as a function of the number of workshops they attended. The Scheffe post-hoc pairwise comparison of the group means in the significant analyses reported above found statistically significant group differences in both cases.

Among teachers of the arts, those attending three workshops [mean response (+/- s.d.) = 3.79 (0.75)] reported statistically greater satisfaction with the staff than those attending 1 workshop [mean response (+/- s.d.) = 3.13 (0.79)].

Among teachers of the sciences, those attending two workshops [mean response (+/- s.d.) = 3.40 (0.73)] reported statistically greater satisfaction with the staff than those

attending no workshops [mean response (+/- s.d.) = 3.00 (0.71)].

Statistically significant differences in the responses given to facilities items as a function of workshop attendance were found, using one-way ANOVA, among teachers of the arts [$F(4,205) = 4.84$, $p = 0.001$] and teachers of the sciences [$F(4,297) = 4.10$, $p = 0.003$]. The responses given to facilities items by teachers of the shared subject matters, supervisors of shared subject matters in Arabic and English Languages, and administrators did not differ statistically as a function of the number of workshops they had attended. The Scheffe post-hoc pairwise comparison of the group means in the significant analyses reported above found statistically significant group differences in both cases.

Among teachers of the arts, those attending three workshops [mean response (+/- s.d.) = 3.43 (0.90)] reported statistically greater satisfaction with the facilities than those attending 1 workshop [mean response (+/- s.d.) = 2.69 (0.75)].

Among teachers of the sciences, those attending two workshops [mean response (+/- s.d.) = 3.29 (0.73)] reported statistically greater satisfaction with the facilities than those attending no workshops [mean response (+/- s.d.) = 2.85 (0.71)] or more than 3 workshops [mean response (+/- s.d.) = 2.89 (0.80)].

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Statistically significant differences in the responses given to textbook items as a function of the workshop attendance were found, using one-way ANOVA, among teachers of the sciences [$F(4,295) = 3.79$, $p = 0.005$] only. The responses given to textbook items by teachers of the shared subject matters, teachers of the arts, and supervisors of the shared subject matters in Arabic and English Languages did not differ statistically as a function of the number of workshops they had attended.

Among teachers of the sciences, the Scheffe post-hoc pairwise comparison of the group means found a small but statistically significant group difference between those teachers of the sciences that had attended two workshops [mean response (+/- s.d.) = 3.69 (0.65)] and those teachers of the sciences that had attended no workshops [mean responses (+/- s.d.) = 3.28 (0.66)].

No statistically significant differences in responses given to teacher's manual items were found among teachers or supervisors as a function of the number of workshops they have attended.

H. Teaching experience

Total teaching experience did not effect teacher or supervisor response to questionnaire items overall. Statistical analyses could be performed on all teacher groups and all but one (Islamic education) supervisor groups because the number of subjects in at least 2 of the teaching

Table 44: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook, & Teacher's Manual items by number of workshops attended.

	NUMBER							
	0 (n)	1 (n)	2 (n)	3 (n)	>3 (n)	F	df	p
Human Resources: Staff Items								
TEACHERS:								
Shared Subject Matters	3.30 (78)	3.37 (55)	3.44 (43)	3.22 (37)	3.28 (100)	<1	4,308	
Arts Subjects	3.30 (55)	3.13 (52)	3.51 (37)	3.79 (36)	3.34 (30)	3.79	4,205	0.005+
Science Subjects	3.00 (47)	3.19 (51)	3.40 (89)	3.16 (51)	3.20 (64)	2.84	4,297	0.025++
SUPERVISORS:								
Shared Subject Matters	3.61 (17)	---- (0)	2.44 (1)	---- (0)	3.34 (17)	1.82	2,32	0.179
Islamic Education	2.38 (11)	---- (0)	---- (0)	---- (0)	2.30 (1)			
Arts Subjects	2.97 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.26 (27)	---- (0)	4.60 (1)	---- (0)	---- (0)			
ADMINISTRATORS:	3.57 (33)	3.34 (11)	3.27 (5)	3.10 (5)	---- (0)	1.42	3,50	0.248
Physical Resources: Equipment, Facilities, and Materials Items								
TEACHERS:								
Shared Subject Matters	3.35 (78)	3.24 (55)	3.18 (43)	3.08 (37)	3.20 (100)	<1	4,308	
Arts Subjects	2.98 (55)	2.69 (52)	3.13 (37)	3.43 (36)	2.81 (30)	4.84	4,205	0.001+
Science Subjects	2.85 (47)	3.08 (51)	3.29 (89)	2.94 (51)	2.89 (64)	4.10	4,297	0.003+++
SUPERVISORS:								
Shared Subject Matters	3.57 (17)	---- (0)	2.59 (1)	---- (0)	3.21 (17)	1.69	2,32	0.200
Islamic Education	2.60 (11)	---- (0)	---- (0)	---- (0)	3.12 (1)			
Arts Subjects	3.01 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.22 (27)	---- (0)	4.25 (1)	---- (0)	---- (0)			
ADMINISTRATORS:	3.28 (33)	3.12 (11)	3.00 (5)	2.87 (5)	---- (0)	<1	3,50	
Textbook Items								
TEACHERS:								
Shared Subject Matters	3.49 (79)	3.51 (55)	3.35 (42)	3.35 (37)	3.39 (100)	<1	4,308	
Arts Subjects	3.76 (55)	3.58 (51)	3.65 (36)	3.78 (35)	3.76 (29)	<1	4,201	
Science Subjects	3.28 (47)	3.37 (51)	3.69 (89)	3.44 (50)	3.49 (63)	3.79	4,295	0.005++
SUPERVISORS:								
Shared Subject Matters	3.71 (17)	---- (0)	2.52 (1)	---- (0)	3.59 (17)	1.80	2,32	0.181
Islamic Education	2.02 (11)	---- (0)	---- (0)	---- (0)	2.17 (1)			
Arts Subjects	3.44 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.55 (27)	---- (0)	4.17 (1)	---- (0)	---- (0)			
Teacher's Manual Items								
TEACHERS:								
Shared Subject Matters	3.38 (74)	3.42 (55)	3.35 (40)	3.24 (37)	3.28 (92)	<1	4,293	
Arts Subjects	3.32 (55)	3.13 (51)	3.24 (37)	3.63 (35)	3.08 (29)	2.32	4,202	0.058
Science Subjects	2.98 (47)	3.16 (48)	3.22 (89)	3.04 (49)	3.17 (60)	1.09	4,288	0.362
SUPERVISORS:								
Shared Subject Matters	3.62 (17)	---- (0)	2.25 (1)	---- (0)	3.41 (16)	2.74	2,31	0.080
Islamic Education	2.28 (11)	---- (0)	---- (0)	---- (0)	2.96 (1)			
Arts Subjects	3.13 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.17 (27)	---- (0)	4.40 (1)	---- (0)	---- (0)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = 3 workshops to differ significantly from 1 workshop; ++ = 2 workshops to differ significantly from 0 workshops; +++ = 2 workshops to differ significantly from 0 & >3 workshops.

experience levels equaled or exceeded 5 per subject area group. Administrators were not assessed on this variable.

1. Theory

Table 45 presents the results obtained from the statistical comparisons of the responses given to the Omani educational objectives (THEORY) items by subjects who differed on the number of years they had been a teacher.

No statistically significant differences in the responses given to Omani educational objective items as a function of teaching experience were found among any teacher or supervisor group.

Table 45: Teacher and supervisor response to Educational Objective items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
TEACHERS:							
Shared Subject Matters	3.80 (43)	3.53 (47)	3.66 (46)	3.70 (185)	<1	3,317	
Arts Subjects	4.27 (13)	4.31 (23)	4.07 (22)	4.12 (153)	1.40	3,207	0.244
Science Subjects	3.63 (27)	3.88 (27)	3.94 (75)	3.94 (179)	2.55	3,304	0.056
SUPERVISORS:							
Shared Subject Matters	3.86 (12)	3.00 (2)	---- (0)	3.43 (21)	1.80	2,32	0.182
Islamic Education	1.96 (9)	1.32 (2)	2.28 (1)	---- (0)			
Arts Subjects	3.85 (14)	3.97 (10)	---- (0)	---- (0)	<1	1,22	
Science Subjects	3.78 (18)	4.02 (10)	---- (0)	---- (0)	1.15	1,26	0.294

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

2. Process and Practice

Table 46 presents the results obtained from the statistical comparisons of the responses given to the methods of instruction items and student assessment techniques items (PROCESSES and PRACTICES) by subjects that differed in the number of years they had been teachers.

Statistically significant differences in the responses given to methods of instruction and student assessment technique items as a function of teaching experience were found, using one-way ANOVA, among supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 3.57$, $p = 0.040$ and $F(2.31) = 3.51$, $p = 0.042$, respectively]. However, the Scheffe post-hoc comparison of the group means did not find two or more groups to differ statistically in either analysis. No other statistically significant differences were obtained in the analyses of the effect of teaching experience on the responses given to methods of instruction or student assessment technique items by teachers of the shared subject matters, teachers of the arts, teachers of the sciences, supervisors of the arts, and supervisors of the sciences responses.

Table 46: Teacher and supervisor response to Classroom Activity items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Methods of Instruction Items							
TEACHERS:							
Shared Subject Matters	3.44 (42)	3.35 (47)	3.33 (46)	3.46 (185)	<1	3,316	
Arts Subjects	3.42 (14)	3.82 (23)	3.30 (21)	3.60 (153)	2.02	3,207	0.112
Science Subjects	3.20 (26)	3.68 (26)	3.48 (74)	3.49 (176)	2.50	3,298	0.060
SUPERVISORS:							
Shared Subject Matters	3.77 (12)	2.64 (2)	---- (0)	3.23 (20)	3.57	2,31	0.040+
Islamic Education	2.35 (9)	1.91 (2)	2.45 (1)	---- (0)			
Arts Subjects	3.36 (14)	3.36 (10)	---- (0)	---- (0)	<1	1,22	
Science Subjects	3.33 (18)	3.75 (10)	---- (0)	---- (0)	2.30	1,26	0.141
Student Assessment Items							
TEACHERS:							
Shared Subject Matters	3.67 (42)	3.48 (47)	3.46 (46)	3.57 (185)	<1	3,316	
Arts Subjects	3.86 (14)	4.13 (23)	3.77 (21)	3.86 (153)	2.19	3,207	0.090
Science Subjects	3.57 (26)	3.88 (26)	3.74 (74)	3.70 (176)	1.87	3,298	0.136
SUPERVISORS:							
Shared Subject Matters	3.79 (12)	3.14 (2)	---- (0)	3.22 (20)	3.51	2,31	0.042+
Islamic Education	2.26 (9)	1.81 (2)	1.68 (1)	---- (0)			
Arts Subjects	3.59 (14)	3.31 (10)	---- (0)	---- (0)	1.23	1,22	
Science Subjects	3.53 (18)	3.72 (10)	---- (0)	---- (0)	<1	1,26	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different.

3. Resources

Table 47 presents the results obtained from the statistical comparisons of the responses given to the staff items, facilities items, textbooks items, and teacher's manual items (RESOURCES) by subjects that differed in the number of years they had been teachers.

Statistically significant differences in the responses given to staff items as a function of teaching experience were found, using one-way ANOVA, among supervisors of the sciences only [$F(1,26) = 2.58$, $p = 0.030$]. The post-hoc Scheffe pairwise comparison of the group means found that supervisors of the sciences with 4 to 6 years of teaching experience [mean response (+/- s.d.) = 3.72 (0.54)] reported statistically greater satisfaction with the quality and availability of the staff than supervisors of the sciences with 1 to 3 years of teaching experience [mean response (+/- s.d.) = 3.09 (0.77)]. No other statistically significant one-way ANOVA was obtained in the analyses of the effect of teaching experience on the responses given to staff items by teachers of the shared subject matters, teachers of the arts, teachers of the sciences, supervisors or the shared subject matters in English and Arabic languages, and supervisors of the arts.

Statistically significant differences in the responses given to facilities items as a function of teaching experience were found, using one-way ANOVA, among

supervisors of the arts only [F(1,22) = 6.72, p = 0.017]. The post-hoc Scheffe pairwise comparison of the group means found supervisors of the sciences with 1 to 3 years of teaching experience [mean response (+/- s.d.) = 3.23 (0.40)] to report slightly but statistically greater satisfaction with the facilities than supervisors of the sciences with 4 to 6 years of teaching experience [mean response (+/-s.d.) = 2.70 (0.59)]. No other statistically significant one-way ANOVA was obtained in the analyses of the responses given to facilities items by teachers of the shared subject matters, teachers of the arts, teachers of the sciences, supervisors or the shared subject matters in English and Arabic languages, and supervisors of the arts.

Statistically significant differences in the responses given to textbook items as a function of teaching experience were found, using one-way ANOVA, among teachers of the sciences only [F(3,296) = 2.81, p = 0.040]. However, the post-hoc Scheffe pairwise comparison of the group means found no statistically significant group differences among the teachers of the sciences. No statistically significant one-way ANOVA's were obtained in the analyses of the effect of teaching experience on the responses given textbook items by teachers of the shared subject matters, teachers of the arts, supervisors of the arts, supervisors of the sciences, or the shared subject matters in English and Arabic language.

Table 47: Teacher and supervisor response to Human and Physical Resource, Textbook, and Teacher's Manual items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{Y}_{(n)}$	4-6 $\bar{Y}_{(n)}$	7-10 $\bar{Y}_{(n)}$	>10 $\bar{Y}_{(n)}$	F	df	p
Human Resources: Staff Items							
TEACHERS:							
Shared Subject Matters	$3.40_{(41)}$	$3.24_{(47)}$	$3.14_{(45)}$	$3.36_{(180)}$	1.66	3,309	0.175
Arts Subjects	$3.39_{(14)}$	$3.78_{(23)}$	$3.21_{(21)}$	$3.35_{(152)}$	2.09	3,206	0.102
Science Subjects	$3.12_{(25)}$	$3.43_{(26)}$	$3.20_{(74)}$	$3.21_{(177)}$	<1	3,298	
SUPERVISORS:							
Shared Subject Matters	$3.58_{(12)}$	$3.32_{(2)}$	----$_{(0)}$	$3.38_{(21)}$	<1	2,32	
Islamic Education	$2.50_{(9)}$	$1.80_{(2)}$	$2.40_{(1)}$	----$_{(0)}$			
Arts Subjects	$3.09_{(14)}$	$2.79_{(10)}$	----$_{(0)}$	----$_{(0)}$	1.46	1,22	0.240
Science Subjects	$3.09_{(18)}$	$3.72_{(10)}$	----$_{(0)}$	----$_{(0)}$	5.28	1,26	0.030*
Physical Resources: Equipment, Facilities, and Materials Items							
TEACHERS:							
Shared Subject Matters	$3.30_{(41)}$	$3.10_{(47)}$	$3.11_{(45)}$	$3.28_{(180)}$	1.12	3,309	0.343
Arts Subjects	$2.99_{(14)}$	$3.42_{(23)}$	$2.77_{(21)}$	$2.95_{(152)}$	2.46	3,206	0.064
Science Subjects	$2.83_{(25)}$	$3.12_{(26)}$	$3.01_{(74)}$	$3.07_{(177)}$	<1	3,298	
SUPERVISORS:							
Shared Subject Matters	$3.54_{(12)}$	$3.68_{(2)}$	----$_{(0)}$	$3.25_{(21)}$	<1	2,32	
Islamic Education	$2.65_{(9)}$	$2.62_{(2)}$	$2.65_{(1)}$	----$_{(0)}$			
Arts Subjects	$3.23_{(14)}$	$2.70_{(10)}$	----$_{(0)}$	----$_{(0)}$	6.72	1,22	0.017*
Science Subjects	$3.14_{(18)}$	$3.46_{(10)}$	----$_{(0)}$	----$_{(0)}$	1.41	1,26	0.245
Textbook Items							
TEACHERS:							
Shared Subject Matters	$3.44_{(40)}$	$3.49_{(47)}$	$3.31_{(45)}$	$3.48_{(181)}$	<1	3,309	
Arts Subjects	$3.77_{(14)}$	$3.96_{(20)}$	$3.40_{(21)}$	$3.67_{(151)}$	1.20	3,202	0.310
Science Subjects	$3.19_{(25)}$	$3.71_{(26)}$	$3.45_{(73)}$	$3.52_{(176)}$	2.81	3,296	0.040*
SUPERVISORS:							
Shared Subject Matters	$3.79_{(12)}$	$3.44_{(2)}$	----$_{(0)}$	$3.53_{(21)}$	<1	2,32	
Islamic Education	$2.14_{(9)}$	$1.70_{(2)}$	$1.72_{(1)}$	----$_{(0)}$			
Arts Subjects	$3.49_{(14)}$	$3.48_{(10)}$	----$_{(0)}$	----$_{(0)}$	<1	1,22	
Science Subjects	$3.51_{(18)}$	$3.69_{(10)}$	----$_{(0)}$	----$_{(0)}$	<1	1,26	
Teacher's Manual Items							
TEACHERS:							
Shared Subject Matters	$3.35_{(38)}$	$3.28_{(43)}$	$3.10_{(42)}$	$3.41_{(175)}$	2.35	3,294	0.073
Arts Subjects	$3.34_{(14)}$	$3.30_{(21)}$	$2.95_{(21)}$	$3.33_{(151)}$	1.12	3,203	0.342
Science Subjects	$2.96_{(21)}$	$3.47_{(25)}$	$2.98_{(72)}$	$3.17_{(175)}$	3.62	3,289	0.014**
SUPERVISORS:							
Shared Subject Matters	$3.62_{(12)}$	$3.14_{(2)}$	----$_{(0)}$	$3.43_{(20)}$	<1	2,31	
Islamic Education	$2.44_{(9)}$	$2.01_{(2)}$	$2.07_{(1)}$	----$_{(0)}$			
Arts Subjects	$3.18_{(14)}$	$3.04_{(10)}$	----$_{(0)}$	----$_{(0)}$	<1	1,22	
Science Subjects	$3.04_{(18)}$	$3.50_{(10)}$	----$_{(0)}$	----$_{(0)}$	3.48	1,26	0.073

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of group means showed: + = no two groups to be significantly different; ** = 4-6 years to differ significantly from 7-10 years.

Statistically significant differences in the responses given to teachers' manual items as a function of teaching experience were found, using one-way ANOVA, among teachers of the sciences only [$F(3,289) = 3.62$, $p = 0.014$]. The post-hoc Scheffe pairwise comparison of the group means found a statistically significant group difference to occur between those teachers of the sciences that had 4 to 6 years of teaching experience [mean response (+/- s.d.) = 3.47 (0.71)] and those teachers of the sciences with 7 to 10 years of teaching experience [mean response (+/- s.d.) = 2.98 (0.67)]. No other statistically significant one-way ANOVA was obtained in the analysis of the effect of teaching experience on the responses given to teacher's manual items by teachers of the shared subject matters, teachers of the arts, supervisors of the arts, supervisors of the sciences, supervisors of Islamic Education, or supervisors of the shared subject matters in English and Arabic languages.

I. Teaching experience in Oman

Teaching experience in Oman did <u>not</u> effect, in a general way, the teacher or supervisor response to questionnaire items. Statistical analyses could be performed on all teacher groups and one supervisor group (shared subject matters in Arabic and English Languages), since only these subject groups had an acceptable number of subjects (greater or equal too 5) in 2 or more levels of

teaching experience in Oman. Administrators were not assessed on this variable.

1. Theory

Table 48 presents the results obtained from the statistical comparisons of the responses given to the Omani educational objectives items (THEORY) by subjects that differed on the number of years they had been a teaching in Oman.

Statistically significant differences in the responses given to Omani educational objective items as a function of teaching experience in Oman were found, using one-way ANOVA, among teachers of the shared subject matters [$F(3,317) = 13.22$, $p < 0.001$] and teachers of the sciences [$F(3,304) = 2.85$, $p = 0.038$]. No statistically significant differences as a function of teaching experience in Oman were found among teachers of the arts or supervisors of the shared subject matters in Arabic and English Languages. The Scheffe post-hoc comparison of the group means in the significant one-way analyses reported above found statistically significant group differences ($p < 0.05$) among the teachers of the shared subject matters only. In this latter group of teachers, those with 1 to 3 years of teaching experience in Oman [mean response (+/- s.d.) = 3.86 (0.78), 4 to 6 years of teaching experience in Oman [mean response (+/- s.d.) = 3.64 (0.69)], or 7 to 10 years of teaching experience in Oman [mean response (+/- s.d.) = 3.56

(0.60)] reported statistically greater satisfaction or agreement with the Omani educational objectives than those with greater than 10 years of teaching experience in Oman [mean response (+/- s.d.) = 2.95 (0.99)].

Table 48: Teacher and supervisor response to Educational Objective items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
TEACHERS:							
Shared Subject Matters	3.86 (175)	3.64 (74)	3.56 (41)	2.95 (31)	13.22	3,317	<0.001*
Arts Subjects	4.15 (132)	4.07 (52)	4.23 (17)	4.28 (10)	<1	3,207	
Science Subjects	3.96 (197)	3.90 (65)	3.81 (26)	3.59 (20)	2.85	3,304	0.038+
SUPERVISORS:							
Shared Subject Matters	3.43 (23)	3.55 (5)	3.49 (3)	4.31 (4)	1.50	3,31	0.233
Islamic Education	1.84 (11)	---- (0)	2.28 (1)	---- (0)			
Arts Subjects	3.93 (22)	3.58 (2)	---- (0)	---- (0)			
Science Subjects	3.79 (24)	4.29 (4)	---- (0)	---- (0)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; *.= 1-3 years, 4-6 years & 7-10 years to differ significantly from >10 years.

2. Process and Practice

Table 49 presents the results obtained from the statistical comparisons of the responses given to the methods of instruction items and student assessment technique items (PROCESSES and PRACTICES) by subjects that differed in the number of years they had been a teacher in Oman.

Statistically significant differences in the responses given to methods of instruction items as a function of teaching experience in Oman were found, using one-way ANOVA, among teachers of the shared subject matters only [$F(3,316) = 3.37$, $p = 0.019$]. No statistically significant differences as a function of teaching experience in Oman were found among teachers of the arts, teachers of the sciences, or supervisors of the shared subject matters in Arabic and English Languages. The Scheffe post-hoc comparison of the group means in the significant one-way analysis reported above found no statistically significant group differences.

Statistically significant differences in the responses given to student assessment techniques items as a function of teaching experience in Oman were found, using one-way ANOVA, among teachers of the shared subject matters only [$F(3,316) = 6.98$, $p < 0.001$]. No statistically significant differences as a function of teaching experience in Oman were found among teachers of the arts, teachers of the

Table 49: Teacher and supervisor response to Classroom Activity items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Methods of Instruction Items							
TEACHERS:							
General Humanities	3.54 (174)	3.31 (74)	3.32 (41)	3.18 (31)	3.37	3,316	0.019+
Arts	3.61 (132)	3.47 (52)	3.71 (17)	3.58 (10)	<1	3,207	
Sciences	3.53 (195)	3.29 (64)	3.53 (24)	3.51 (19)	2.38	3,298	0.070
SUPERVISORS:							
General Humanities	3.36 (23)	3.47 (5)	3.06 (3)	3.76 (3)	<1	3,30	
Islamic	2.27 (11)	---- (0)	2.45 (1)	---- (0)			
Arts	3.37 (22)	3.27 (2)	---- (0)	---- (0)			
Sciences	3.32 (24)	4.44 (4)	---- (0)	---- (0)			
Student Assessment Items							
TEACHERS:							
General Humanities	3.70 (174)	3.45 (74)	3.34 (41)	3.23 (31)	6.98	3,316	<0.001*
Arts	3.90 (132)	3.86 (52)	3.88 (17)	3.78 (10)	<1	3,207	
Sciences	3.76 (195)	3.63 (64)	3.72 (24)	3.55 (19)	1.78	3,298	0.151
SUPERVISORS:							
General Humanities	3.43 (23)	3.17 (5)	3.04 (3)	4.04 (3)	1.52	3,30	0.229
Islamic	2.18 (11)	---- (0)	1.68 (1)	---- (0)			
Arts	3.52 (22)	3.00 (2)	---- (0)	---- (0)			
Sciences	3.46 (24)	4.42 (4)	---- (0)	---- (0)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = 1-3 years to differ significantly from 7-10 years & >10 years.

sciences, or supervisors of the shared subject matters. The Scheffe post-hoc comparison of the group means in the significant one-way analysis reported above found statistically significant group differences among teachers of the shared subject matters. Those that had had 1 to 3 years if teaching experiences in Oman [mean response (+/- s.d.) = 3.70 (0.69)] differed statistically from those that had 7 to 10 years or more than 10 years of teaching experience in Oman [mean responses (+/- s.d.) of 3.34 (0.54) and 3.23 (0.94) respectively].

3. Resources

Table 50 presents the results obtained from the statistical comparisons of the responses given to the staff items, facilities items, textbooks items, and the teacher's manual items (RESOURCES) by subjects who differed in the number of years they had been a teacher in Oman.

Statistically significant differences in the responses given to staff facilities items as a function of teaching experience in Oman were found, using one-way ANOVA, among teachers of the shared subject matters [$F(3,309) = 2.95$, $p = 0.033$] and teachers of the sciences [$F(3,298) = 6.42$, $p < 0.001$], respectively. No statistically significant differences as a function of teaching experience in Oman were found among teachers of the arts, or supervisors of the shared subject matters in Arabic and English Languages. The Scheffe post-hoc comparison of the group means in the

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significant one-way analyses given above found a statistically significant group differences in the teachers of the sciences analysis only.

Among teachers of the sciences, those that had taught in Oman for 1 to 3 years [mean response (+/- s.d.) = 3.15 (0.76)] reported greater satisfaction with the facilities than those teachers that had taught for 4 to 6 years in Oman [mean response (+/- s.d.) = 2.69 (0.68)].

Statistically significant differences in the responses given to textbook items as a function of teaching experience in Oman were found, using one-way ANOVA, among teachers of the shared subject matters only [$F(3,309) = 5.22$, $p = 0.002$]. No statistically significant differences as a function of teaching experience in Oman were found among teachers of the arts, teachers of the sciences, or supervisors of the shared subject matters in Arabic and English Languages. The Scheffe post-hoc comparison of the group means in the significant one-way ANOVA reported above found statistically significant group differences, such that those teachers of the shared subject matters that had 1 to 3 years of teaching experience in Oman [mean response (+/- s.d.) = 3.54 (0.80)], 4 to 6 years of teaching experience in Oman [mean response (+/- s.d.) = 3.41 (0.58)], or 7 to 10 years of teaching experience in Oman [mean response (+/- s.d.) = 3.47 (0.65)] differed statistically from those teachers of the shared subject matters who had more than 10

Table 50: Teacher and supervisor response to Human and Physical Resource, Textbook, & Teacher's Manual Items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{Y}$ (n)	4-6 $\bar{Y}$ (n)	7-10 $\bar{Y}$ (n)	>10 $\bar{Y}$ (n)	F	df	p
Human Resources: Staff Items							
TEACHERS:							
Shared Subject Matters	3.42 (173)	3.23 (74)	3.19 (39)	3.10 (27)	2.95	3,309	0.033+
Arts Subjects	3.38 (132)	3.44 (52)	3.31 (17)	3.28 (10)	<1	3,206	
Science Subjects	3.28 (196)	3.04 (63)	3.21 (24)	3.22 (19)	1.91	3,298	0.128
SUPERVISORS:							
Shared Subject Matters	3.40 (23)	3.64 (5)	3.03 (3)	3.78 (4)	<1	3,31	
Islamic Education	2.37 (11)	---- (0)	2.40 (1)	---- (0)			
Arts Subjects	2.99 (22)	2.68 (2)	---- (0)	---- (0)			
Science Subjects	3.13 (24)	4.38 (4)	---- (0)	---- (0)			
Physical Resources: Equipment, Facilities, and Materials Items							
TEACHERS:							
Shared Subject Matters	3.29 (173)	3.15 (74)	3.21 (39)	3.09 (27)	<1	3,309	
Arts Subjects	2.99 (131)	3.13 (52)	2.75 (17)	2.64 (10)	1.44	3,206	0.232
Science Subjects	3.15 (196)	2.69 (63)	2.97 (24)	3.21 (19)	6.42	3,298	<0.001*
SUPERVISORS:							
Shared Subject Matters	3.34 (23)	3.34 (5)	3.00 (3)	3.84 (4)	<1	3,31	
Islamic Education	2.64 (11)	---- (0)	2.65 (1)	---- (0)			
Arts Subjects	3.05 (22)	2.53 (2)	---- (0)	---- (0)			
Science Subjects	3.09 (24)	4.21 (4)	---- (0)	---- (0)			
Textbook Items							
TEACHERS:							
Shared Subject Matters	3.54 (174)	3.41 (74)	3.47 (38)	2.95 (27)	5.22	3,309	0.002**
Arts Matters	3.72 (130)	3.57 (50)	3.91 (16)	3.78 (10)	1.10	3,202	0.352
Science Matters	3.54 (196)	3.31 (63)	3.57 (22)	3.44 (19)	2.16	3,296	0.093
SUPERVISORS:							
Shared Subject Matters	3.59 (23)	3.91 (5)	3.16 (3)	3.77 (4)	1.00	3,31	0.404
Islamic Education	2.06 (11)	---- (0)	1.78 (1)	---- (0)			
Arts Subjects	3.44 (22)	3.44 (2)	---- (0)	---- (0)			
Science Subjects	3.50 (24)	4.00 (4)	---- (0)	---- (0)			
Teacher's Manual Items							
TEACHERS:							
Shared Subject Matters	3.42 (171)	3.29 (70)	3.25 (32)	3.05 (25)	2.49	3,294	0.061
Arts Subjects	3.31 (131)	3.11 (50)	3.52 (16)	3.49 (10)	1.28	3,203	0.283
Science Subjects	3.18 (195)	2.90 (60)	3.24 (22)	3.29 (16)	3.01	3,289	0.031+
SUPERVISORS:							
Shared Subject Matters	3.39 (23)	3.55 (5)	3.35 (2)	3.95 (4)	<1	3,30	
Islamic Education	2.37 (11)	---- (0)	2.07 (1)	---- (0)			
Arts Subjects	3.14 (22)	2.98 (2)	---- (0)	---- (0)			
Science Subjects	3.13 (24)	3.73 (4)	---- (0)	---- (0)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = 1-3 years to differ significantly from 4-6 years; ** = 1-3 years, 4-6 years & 7-10 years to differ significantly from >10 years.

years of teaching experience in Oman [mean response (+/- s.d.) = 2.95 (0.78)].

Statistically significant differences in the responses given to teacher's manual items as a function of teaching experience in Oman were found, using one-way ANOVA, among teachers of the sciences only [$F(3,289) = 3.01$, $p = 0.031$]. No statistically significant differences as a function of teaching experience in Oman were found among teachers of the shared subject matters, teachers of the arts, or supervisors of the shared subject matters in Arabic and English Languages. The Scheffe post-hoc comparison of the group means in the significant one-way analysis revealed no statistically significant group differences among the teachers of the sciences.

V. A COMPARISON BY ATTITUDE TOWARD FIVE EDUCATIONAL CONCEPTS (FACTORS) OF THE RESPONSES GIVEN TO THEORY, PROCESS AND PRACTICE, AND RESOURCES ITEMS BE TEACHERS, SUPERVISORS, AND ADMINISTRATORS: ONE-WAY ANOVA

Five independent variables were developed from the responses given to the questionnaire items in Part I Section B part 1 "Opinion Survey". These items assessed the subject's attitude toward five concepts in educational philosophy.

During an earlier pilot study, a Factor Analysis of the type of responses given to these items found five concepts assessed in this portion of the questionnaire. These five factors address the importance of the concepts listed below.

Factor I: What is the importance of developing the student's whole personality [holistic vs single dimension curriculum]?

Factor II: What is the importance of promoting a democratic approach to teaching [democratic vs authoritarian curriculum]?

Factor III: What is the importance of using a student-centered curriculum?

Factor IV: What is the importance of integrating the student's social and cultural heritage into the curriculum?

Factor V: What is the importance of developing the student's thinking abilities?

The response to a factor by each teacher, supervisor, and administrator was calculated by determining the mean response they gave to the items that made-up the factor. Their average response to the items that made-up each factor was then rated as either high (mean response ≥ 4.0), medium (mean response < 4.0 and > 2.0), or low (mean response ≤ 2.0). These ratings are interpreted as indicating how the teacher, supervisor, or administrator conceptualized each factor: highly important (strongly agree), moderately important (neutral), or not important (disagree). The subjects' attitude toward each factor (highly important, important, unimportant) was used as a non-manipulated independent variable to determine if his/her attitude toward the factor statistically differentiated the responses she/he gave to questionnaire items addressing the Omani curriculum: Theory, Process and Practice, Resources, and Curriculum content. To assess this predication the responses given each section of the questionnaire by teachers, supervisors,

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and administrators were examined as a function of the subject's response (high important, moderately important, or unimportant) to each Factor. All analyses were performed by one-way ANOVA.

The analyses of the teacher and administrator samples, used only those subjects that rated the factor as high or medium, because only a very small number of subjects (less than 5 percent) indicated that they did not find the Factors important (see also Table 12). Some statistical analyses among supervisors of Islamic Education and supervisors of the arts were not performed because all or, all but a very few subjects, had given similar responses to the factor and, thus, had the same rating. In those cases where no statistical analyses were performed, the mean responses are still reported in the corresponding tables, so that the reader can examine the overall response of these supervisors of light of their attitudes toward the factor (albeit high, medium, or low) and, in comparison to the responses given by subjects in other subject matter areas.

In the table below the results obtained from the one-way ANOVA analyses are presented by Factor. In all cases of statistical significances, the positive relationship was found between the factor rating and the magnitude of the response given to the specific curriculum items under assessment, indicating that the degree of satisfaction (or agreement) with a particular curriculum topic was greater if

the subjects found the concept described by the factor very important. When this type of relationship occurs, it suggests that the curriculum reflects the concept described by the factor, since one would predict greater satisfaction with the curriculum if its structure and/or practice was consistent with the subject's attitude.

No mean rating scores are reported since these scores do not correspond to the scale used in the questionnaire (5 point response scale), although, the mean ratings are reported in the F tables that follow in each section.

A. Factor I: The importance of developing the students' personality

1. Theory

Statistically significant differences in the responses given to Omani educational objective items as a function of attitude toward Factor I were found among all teachers groups [shared subject matters $F(1,299) = 149.48$, $p < 0.001$; arts $F(1,209) = 87.36$, $p < 0.001$; and sciences $F(1,304) = 52.78$, $p < 0.001$], all supervisors groups assessed [shared subject matters in Arabic and English Languages $F(2,32) = 51.89$, $p < 0.001$; Islamic Education $F(1,10) = 14.43$, $p = 0.004$; and sciences $F(1,26) = 19.20$, $p < 0.001$] , and administrators [$F(1,72) = 4.65$, $p = 0.034$] (Table 51). Among these educators, those who rated the holistic approach

as very important also gave the greatest level of agreement and support to the Omani educational objectives.

2. Process and Practice

Statistically significant differences in the responses given to method of instruction items as a function of attitude toward Factor I were found among teachers of the shared subject matters [$F(1,297) = 30.83$, $p < 0.001$],

Table 51: Teacher, supervisor, and administrator response to Educational Objective items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	4.08 (198)	3.29 (103)		149.48	1,299	<0.001*
Arts Subjects	4.28 (171)	3.57 (40)		87.36	1,209	<0.001*
Science Subjects	4.05 (218)	3.59 (88)		52.78	1,304	<0.001*
SUPERVISORS:						
Shared Subject Matters	4.12 (20)	2.92 (12)	2.33 (3)	51.89	2,32	<0.001**
Islamic Education	---- (0)	2.30 (5)	1.58 (7)	14.43	1,10	0.004*
Arts Subjects	4.04 (21)	2.95 (3)	---- (0)			
Science Subjects	4.14 (18)	3.37 (10)	---- (0)	19.20	1,26	<0.001*
ADMINISTRATORS:	4.15 (64)	3.85 (10)		4.65	1,72	0.034*

^Only supervisors were assessed at three levels of this variable.
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant
The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

teachers of the arts [$F(1,208) = 16.91$, $p < 0.001$], and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 7.21$, $p = 0.003$] (Table 52). Among these educators, those who rated the holistic approach as very important also gave the greatest level of satisfaction and support to the methods of instruction used at the Secondary school level in Oman. Among teachers of the sciences [$F(1,298) = 2.90$, $p = 0.090$], supervisors of the Islamic Education [$F(1,10) < 1$], supervisors of the sciences [$F(1,26) < 1$], and administrators [$F(1,72) = 3.90$, $p = 0.052$], no statistically significant differences were found between the subject's attitude toward the holistic approach and his/her satisfaction with the methods of teaching (Table 52).

Statistically significant differences in the responses given to student assessment technique items as a function of attitude toward Factor I were found among all teacher groups [shared subject matters $F(1,297) = 48.10$, $p < 0.001$; arts $F(1,208) = 22.18$, $p < 0.001$; and sciences $F(1,298) = 9.76$, $p = 0.002$] and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 5.73$, $p = 0.008$] (Table 52). Among these educators, those who rated the holistic approach as very important also showed the greatest level of satisfaction with the student assessment techniques used at the Secondary school level in Oman. Among supervisors of the Islamic Education [$F(1,10) < 1$],

Table 52: Teacher, supervisor, and administrator response to Classroom Activity items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
Methods of Instruction Items						
TEACHERS:						
Shared Subject Matters	3.65 (196)	3.21 (103)		30.83	1,297	<0.001*
Arts Subjects	3.68 (170)	3.16 (40)		16.91	1,208	<0.001*
Science Subjects	3.53 (214)	3.39 (86)		2.90	1,298	0.090
SUPERVISORS:						
Shared Subject Matters	3.75 (19)	2.94 (12)	2.85 (3)	7.21	2,31	0.003**
Islamic Education	---- (0)	2.38 (5)	2.22 (7)	<1	1,10	
Arts Subjects	3.43 (21)	2.85 (3)	---- (0)			
Science Subjects	3.57 (18)	3.33 (10)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.74 (64)	3.37 (10)		3.90	1,72	0.052
Student Assessment Items						
TEACHERS:						
Shared Subject Matters	3.81 (196)	3.35 (103)		48.10	1,297	<0.001*
Arts Subjects	3.96 (170)	3.55 (40)		22.18	1,208	<0.001*
Science Subjects	3.78 (214)	3.59 (86)		9.76	1,298	0.002*
SUPERVISORS:						
Shared Subject Matters	3.71 (19)	2.99 (12)	3.27 (3)	5.73	2,31	0.008**
Islamic Education	---- (0)	2.28 (5)	2.04 (7)	<1	1,10	
Arts Subjects	3.56 (21)	2.89 (3)	---- (0)			
Science Subjects	3.64 (18)	3.51 (10)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.71 (64)	3.57 (10)		<1	1,72	

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

supervisors of the sciences [F(1,26) < 1], and administrators [F(1,72) < 1], no statistically significant difference were found between the subjects' attitudes toward the holistic approach and their satisfaction with the student assessment techniques (Tables 52).

3. Resources

Statistically significant differences in the responses given to staff items as a function of attitude toward Factor I were found among teachers of the shared subject matters [F(1,291) = 19.57, p < 0.001], teachers of the arts [F(1,207) = 16.78, p < 0.001], and supervisors of the shared subject matters in Arabic and English Languages [F(2,32) = 7.35, p = 0.002] (Table 53). Among these educators, those who rated the holistic approach as very important also gave the greatest level of satisfaction with the availability and use of the staff. Among teachers of the sciences [F(1,298) = 1.06, p = 0.303], supervisors of the Islamic Education [F(1,10) = 1.93, p = 0.195], supervisors of the sciences [F(1,26) < 1], and administrators [F(1,72) < 1], no statistically significant differences were found between the subjects' attitude toward the holistic approach and the satisfaction with the staff (Table 53).

Statistically significant differences in the responses given to facility, material, and equipment items as a function of attitude toward Factor I were found among teachers of the shared subject matters [F(1,291) = 11.94, p

< 0.001], supervisors of the shared subject matters in Arabic and English Languages [F(2,32) = 6.73, p = 0.004], and supervisors of the sciences [F(1,26) = 5.42, p = 0.028] (Table 53). Among these educators, those who rated the holistic approach as very important also gave the greatest level of satisfaction to the availability and use of the facilities, materials, and equipment. Among teachers of the arts [F(1,207) = 1.82, p = 0.179], teachers of the sciences [F(1,298) < 1], supervisors of the Islamic Education [F(1,10) < 1], and administrators [F(1,72) < 1], no statistically significant differences were found between the subjects' attitude toward the holistic approach and their satisfaction with the facilities, materials, and equipment (Table 53).

Statistically significant differences in the responses given to textbook items as a function of attitude toward Factor I were found among all teacher groups [shared subject matters [F(1,291) = 53.37, p < 0.001; arts F(1,203) = 19.81, p < 0.001; and sciences F(1,296) = 11.04, p = 0.001], supervisors of the shared subject matters in Arabic and English Languages [F(2,32) = 7.23, p = 0.003], and supervisors of the sciences [F(1,26) = 5.06, p = 0.033] (Table 53). Among these educators, those who rated the holistic approach as very important also gave the greatest level of satisfaction to the availability and quality of the textbook. Among supervisors of the Islamic Education

[F(1,10) < 1], no statistically significant differences were found between the subjects' attitudes toward the holistic approach and their satisfaction with the textbook (Tables 53).

Statistically significant differences in the responses given to teachers' manual items as a function of attitude toward Factor I were found among teachers of the shared subject matters [F(1,276) = 19.62, p < 0.001], teachers of the arts [F(1,204) = 9.10, p = 0.003], and supervisors of the shared subject matters in Arabic and English Languages [F(2,31) = 9.51, p < 0.001] (Table 53). Among these educators, those that rated the holistic approach as very important also gave the greatest level of satisfaction to the availability and quality of the teachers' manual (Table 53). Among teachers of the sciences [F(1,289) = 2.14, p = 0.145], supervisors of the Islamic Education [F(1,10) < 1], supervisors of the sciences [F(1,26) = 3.93, p = 0.58], no statistically significant differences were found between the subjects' attitudes toward the holistic approach and their satisfaction with the teachers' manual (Table 53).

Table 33: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook, and Teacher's Manual Items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE					
	STRONGLY AGREE $\bar{Y}$ (n)	NEUTRAL $\bar{Y}$ (n)	STRONGLY DISAGREE* $\bar{Y}$ (n)	F	df	p
Human Resources Staff Items						
TEACHERS:						
Shared Subject Matters	3.49 (195)	3.13 (98)		19.57	1,291	<0.001*
Arts Subjects	3.50 (169)	2.91 (40)		16.78	1,207	<0.001*
Science Subjects	3.25 (215)	3.16 (85)		1.06	1,298	0.303
SUPERVISORS:						
Shared Subject Matters	3.77 (20)	3.04 (12)	2.00 (3)	7.35	2,32	0.002**
Islamic Education	---- (0)	2.62 (5)	2.20 (7)	1.93	1,10	0.195
Arts Subjects	3.03 (21)	2.50 (3)	---- (0)			
Science Subjects	3.38 (18)	3.19 (10)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.50 (64)	3.48 (10)		<1	1,72	
Physical Resources Equipment, Facilities, and Materials Items						
TEACHERS:						
Shared Subject Matters	3.37 (195)	3.05 (98)		11.94	1,291	<0.001*
Arts Subjects	3.03 (169)	2.82 (40)		1.82	1,207	0.179
Science Subjects	3.04 (215)	3.05 (85)		<1	1,298	
SUPERVISORS:						
Shared Subject Matters	3.71 (20)	2.87 (12)	3.12 (3)	6.73	2,32	0.004**
Islamic Education	---- (0)	2.65 (5)	2.64 (7)	<1	1,10	
Arts Subjects	3.05 (21)	2.75 (3)	---- (0)			
Science Subjects	3.44 (18)	2.80 (10)	---- (0)	5.42	1,26	0.028*
ADMINISTRATORS:	3.27 (64)	3.27 (10)		<1	1,72	
Textbook Items						
TEACHERS:						
Shared Subject Matters	3.72 (196)	3.14 (97)		53.37	1,291	<0.001*
Arts Subjects	3.79 (168)	3.25 (37)		19.81	1,203	<0.001*
Science Subjects	3.58 (214)	3.30 (84)		11.04	1,296	0.001*
SUPERVISORS:						
Shared Subject Matters	3.90 (20)	3.33 (12)	2.89 (3)	7.23	2,32	0.003**
Islamic Education	---- (0)	2.11 (5)	1.98 (7)	<1	1,10	
Arts Subjects	3.38 (21)	2.41 (3)	---- (0)			
Science Subjects	3.72 (18)	3.32 (10)	---- (0)	5.06	1,26	0.033*
Teacher's Manual Items						
TEACHERS:						
Shared Subject Matters	3.51 (195)	3.15 (83)		19.62	1,276	<0.001*
Arts Subjects	3.37 (169)	2.89 (37)		9.10	1,204	0.003*
Science Subjects	3.18 (212)	3.04 (79)		2.14	1,289	0.145
SUPERVISORS:						
Shared Subject Matters	3.77 (20)	3.17 (11)	2.65 (3)	9.51	2,31	<0.001**
Islamic Education	---- (0)	2.48 (5)	2.24 (7)	<1	1,10	
Arts Subjects	3.21 (21)	2.57 (3)	---- (0)			
Science Subjects	3.39 (18)	2.92 (10)	---- (0)	3.93	1,26	0.058

*Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

B. Factor II: The importance of using a democratic approach in the classroom

1. Theory

Statistically significant differences in the responses given to Omani educational objective items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters $F(1,282) = 60.42$, $p < 0.001$; arts $F(1,208) = 53.53$, $p < 0.001$; and sciences $F(1,299) = 80.11$, $p < 0.001$], all supervisors groups assessed [shared subject matters in Arabic and English Languages $F(2,32) = 22.13$, $p < 0.001$; arts $F(1,22) = 7.66$, $p = 0.011$; and sciences $F(1,26) = 13.36$, $p = 0.001$], and administrators [$F(1,72) = 7.17$, $p = 0.009$] (Table 54). Among these educations, those who rated the use of a democratic classroom approach as very important also gave the greatest level of agreement with the Omani educational objectives (Table 54).

2. Process and Practice

Statistically significant differences in the responses given to method of instruction items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters $F(1,280) = 43.91$, $p < 0.001$; arts $F(1,207) = 12.01$, $p < 0.001$; and sciences $F(1,296) = 23.67$, $p < 0.001$], supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 3.96$, $p = 0.029$], and administrators [$F(1,72) = 10.89$, $p = 0.002$] (Table 55). Among these educations, those who rated the democratic

Table 54: Teacher, supervisor, and administrator response to Educational Objective items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	4.04 (198)	3.49 (86)		60.42	1,282	<0.001*
Arts Subjects	4.26 (170)	3.68 (40)		53.53	1,208	<0.001*
Science Subjects	4.09 (216)	3.55 (85)		80.11	1,299	<0.001*
SUPERVISORS:						
Shared Subject Matters	4.08 (19)	3.00 (14)	2.43 (2)	22.13	2,32	<0.001**
Islamic Education	---- (0)	---- (0)	1.88 (12)			
Arts Subjects	4.03 (19)	3.41 (5)	---- (0)	7.66	1,22	0.011*
Science Subjects	4.07 (20)	3.34 (8)	---- (0)	13.36	1,26	0.001*
ADMINISTRATORS:	4.17 (61)	3.84 (13)		7.17	1,72	0.009*

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

classroom management approach as very important also gave the greatest level of satisfaction to the methods of instruction techniques used at the Secondary school level in Oman. Among supervisors of the arts [$F(1,22) = 2.05$, $p =$

0.166] and supervisors of the sciences [F(1,26) = 1.45, p = 0.24], no statistically significant difference was found between the subjects' attitudes toward the use of a democratic classroom management approach and their satisfaction with the methods of teaching (Table 55).

Statistically significant differences in the responses given to student assessment technique items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters F(1,280) = 41.40, p < 0.001; arts F(1,207) = 27.99, p < 0.001; and sciences F(1,296) = 30.67, p < 0.001], supervisors of the shared subject matters in Arabic and English Languages [F(2,31) = 4.09, p = 0.027], and administrators [F(1,72) = 9.13, p = 0.004] (Table 55). Among these educators, those who rated the use of a democratic classroom management approach as very important also gave the greatest level of satisfaction with the student assessment techniques used in Oman. Among supervisors of the arts [F(1,22) = 4.25, p = 0.051] and supervisors of the sciences [F(1,26) = 2.03, p = 0.167], no statistically significant differences were found in the responses given to student assessment technique items as a function of the subjects' attitudes toward the use of a democratic classroom management approach (Tables 55).

Table 55: Teacher, supervisor, and administrator response to Classroom Activity items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
Methods of Instruction Items						
TEACHERS:						
Shared Subject Matters	3.69 (196)	3.14 (86)		43.91	1,280	<0.001*
Arts Subjects	3.66 (170)	3.21 (39)		12.01	1,207	<0.001*
Science Subjects	3.60 (214)	3.22 (84)		23.67	1,296	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.69 (18)	3.01 (14)	3.23 (2)	3.96	2,31	0.029**
Islamic Education	---- (0)	---- (0)	2.29 (12)			
Arts Subjects	3.45 (19)	3.02 (5)	---- (0)	2.05	1,22	0.166
Science Subjects	3.58 (20)	3.23 (8)	---- (0)	1.45	1,26	0.240
ADMINISTRATORS:	3.78 (61)	3.26 (13)		10.89	1,72	0.002*
Student Assessment Items						
TEACHERS:						
Shared Subject Matters	3.83 (196)	3.38 (86)		41.40	1,280	<0.001*
Arts Subjects	3.97 (170)	3.51 (39)		27.99	1,207	<0.001*
Science Subjects	3.82 (214)	3.50 (84)		30.67	1,296	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.68 (18)	3.07 (14)	3.39 (2)	4.09	2,31	0.027**
Islamic Education	---- (0)	---- (0)	2.14 (12)			
Arts Subjects	3.60 (19)	3.00 (5)	---- (0)	4.25	1,22	0.051
Science Subjects	3.69 (20)	3.36 (8)	---- (0)	2.03	1,26	0.167
ADMINISTRATORS:	3.76 (61)	3.35 (13)		9.13	1,72	0.004*

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

3. Resources

Statistically significant differences in the responses given to staff items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters $F(1,276) = 30.37$, $p < 0.001$; arts $F(1,206) = 10.96$, $p = 0.001$; and sciences $F(1,296) = 16.48$, $p < 0.001$] and administrators [$F(1,72) = 11.59$, $p = 0.001$] (Table 56). Among these educators, those who rated the use of a democratic classroom management approach as very important also showed the greatest level of satisfaction with the quality and availability of the staff. Among all supervisors assessed [shared subject matters in Arabic and English language $F(2,32) = 2.69$, $p = 0.083$; arts $(1,22) = 2.45$, $p = 0.132$; and sciences $F(1,26) < 1$] , no statistically significant differences were found in the response given to staff quality and availability as a function of the subjects' attitude toward using a democratic classroom management approach (Tables 56).

Statistically significant differences in the responses given to facilities, materials, and equipment items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters $F(1,276) = 16.76$, $p < 0.001$; arts $F(1,206) = 5.23$, $p = 0.023$; and sciences $F(1,296) = 19.28$, $p < 0.001$] and administrators [$F(1,72) = 5.82$, $p = 0.018$] (Table 56). Among these educators, those who rated the use of the democratic classroom management

approach as very important also gave the greatest level of satisfaction with the facilities, materials, and equipment. Among all supervisors assessed [shared subject matters in Arabic and English Languages $F(2,32) = 2.32$, $p = 0.114$; arts $F(1,22) = 1.16$, $p = 0.292$; and sciences $F(1,26) < 1$], no statistically significant differences were found in the level of satisfaction given to facilities, materials, and equipment items as a function of the subjects' attitude toward using a democratic classroom management approach (Tables 56).

Statistically significant differences in the responses given to textbook items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters $F(1,276) = 24.56$, $p < 0.001$; arts $F(1,202) = 26.38$, $p < 0.001$; and sciences $F(1,294) = 43.46$, $p < 0.001$] and supervisors of the arts [$F(1,22) = 22.97$, $p < 0.001$] (Table 56). Among these educators, those who rated the use of a democratic classroom management approach as very important also gave the greatest level of satisfaction with the quality and availability of the textbooks. Among supervisors of the sciences [$F(1,26) = 2.47$, $p = 0.128$], no statistically significant differences were found between the level of satisfaction given to the textbooks and the subjects' attitude toward using a democratic classroom management approach (Table 56). Among supervisors of the shared subject matters in Arabic and English Languages

[F(2,32) = 3.56, p = 0.040], no statistically significant group differences were found upon the subsequent Scheffe probe [Scheffe statistic = p > 0.05] of the significant one-way ANOVA, finding the level of satisfaction with textbooks unrelated to the subjects' attitude toward the use of a democratic classroom management approach (Tables 56).

Statistically significant differences in the responses given to teachers' manual items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters F(1,272) = 19.64, p < 0.001; arts F(1,203) = 16.41, p < 0.001; and sciences F(1,287) = 13.69, p < 0.001], supervisors of the arts [F(1,22) = 7.23, p = 0.013] (Table 56). Among these educators, those who rated the use of a democratic classroom management approach as very important also gave the greatest level of satisfaction with the teachers' manuals. Among supervisors of the sciences [F(1,26) = 1.05, p = 0.315], no statistically significant differences were found between the level of satisfaction with the teachers' manuals and the subjects' attitude toward using a democratic classroom management approach (Table 56). Among supervisors of the shared subject matters in Arabic and English Languages [F(2,31) = 3.65, p = 0.038], no statistically significant group differences (Scheffe, p > 0.05) were found in the subsequent Scheffe probe of the significant one-way ANOVA (Table 56), suggesting no significant relationship between the response given to

Table 56: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook, and Teacher's Manual items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE: STRONGLY AGREE $\bar{Y}$ (n)	NEUTRAL $\bar{Y}$ (n)	STRONGLY DISAGREE* $\bar{Y}$ (n)	F	df	p
Human Resources Staff Items						
TEACHERS:						
Shared Subject Matters	3.54 (193)	3.09 (85)		30.37	1,276	<0.001*
Arts Subjects	3.48 (169)	2.99 (39)		10.96	1,206	0.001*
Science Subjects	3.33 (215)	2.97 (83)		16.48	1,296	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.68 (19)	3.18 (14)	3.10 (2)	2.69	2,32	0.083
Islamic Education	---- (0)	---- (0)	2.38 (12)			
Arts Subjects	3.04 (19)	2.60 (5)	---- (0)	2.45	1,22	0.132
Science Subjects	3.3 (20)	3.3 (8)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.60 (61)	3.02 (13)		11.59	1,72	0.001*
Physical Resources Equipment, Facilities, and Materials Items						
TEACHERS:						
Shared Subject Matters	3.4 (193)	3.00 (85)		16.76	1,276	<0.001*
Arts Subjects	3.05 (169)	2.70 (39)		5.23	1,206	0.023*
Science Subjects	3.14 (215)	2.74 (83)		19.28	1,296	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.60 (19)	3.04 (14)	3.38 (2)	2.32	2,32	0.114
Islamic Education	---- (0)	---- (0)	2.64 (12)			
Arts Subjects	3.07 (19)	2.78 (5)	---- (0)	1.16	1,22	0.292
Science Subjects	3.28 (20)	3.19 (8)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.34 (61)	2.83 (13)		5.82	1,72	0.018*
Textbook Items						
TEACHERS:						
Shared Subject Matters	3.69 (194)	3.28 (84)		24.54	1,276	<0.001*
Arts Subjects	3.81 (166)	3.29 (38)		26.38	1,202	<0.001*
Science Subjects	3.65 (213)	3.13 (83)		43.46	1,294	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.85 (19)	3.38 (14)	3.00 (2)	3.56	2,32	0.040*
Islamic Education	---- (0)	---- (0)	2.03 (12)			
Arts Subjects	3.68 (19)	2.52 (5)	---- (0)	22.97	1,22	<0.001*
Science Subjects	3.44 (20)	3.35 (8)	---- (0)	2.47	1,26	0.128
Teacher's Manual Items						
TEACHERS:						
Shared Subject Matters	3.5 (193)	3.14 (81)		19.64	1,272	<0.001*
Arts Subjects	3.40 (168)	2.77 (37)		16.41	1,203	<0.001*
Science Subjects	3.23 (210)	2.90 (79)		13.69	1,287	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.70 (19)	3.25 (13)	2.85 (2)	3.65	2,31	0.038*
Islamic Education	---- (0)	---- (0)	2.34 (12)			
Arts Subjects	3.27 (19)	2.60 (5)	---- (0)	7.23	1,22	0.013*
Science Subjects	3.30 (20)	3.03 (8)	---- (0)	1.05	1,26	0.315

*Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: * = no two groups with five (5) or more subjects to be statistically significant.

teachers' manual items and these supervisors' attitudes toward a democratic classroom management approach.

C. Factor III: The importance of a student-centered curriculum

1. Theory

Statistically significant differences in the responses given to Omani educational objective items as a function of attitude toward Factor III were found among all teacher groups [shared subject matters $F(1,292) = 74.86$, $p < 0.001$; arts $F(1,207) = 57.63$, $p < 0.001$; and sciences $F(1,300) = 51.99$, $p < 0.001$], all supervisor groups assessed [shared subject matters in Arabic and English Languages $F(2,32) = 19.81$, $p < 0.001$; arts $F(1,22) = 18.08$, $p < 0.001$; and sciences $F(1,26) = 13.56$, $p = 0.001$], and administrators [$F(1,72) = 5.18$, $p = 0.026$] (Table 57). Among these educators, those that rated a student-centered curriculum as very important, also gave the greatest level of agreement to the Omani educational objectives.

2. Process and Practice

Statistically significant differences in the responses given to method of instruction items as a function of attitude toward Factor III were found among all teacher groups [shared subject matters $F(1,290) = 45.44$, $p < 0.001$; arts $F(1,206) = 10.26$, $p = 0.002$; and sciences $F(1,297) = 6.24$, $p = 0.013$], supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 7.41$, $p = 0.002$], and administrators [$F(1,72) = 7.99$, $p = 0.006$] (Table 58).

Among these educators, those who rated a student-centered curriculum as very important also gave the greatest level of

Table 57: Teacher, supervisor, and administrator response to Educational Objective items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	4.02 (205)	3.41 (89)		74.86	1,292	<0.001*
Arts Subjects	4.27 (171)	3.66 (38)		57.63	1,207	<0.001*
Science Subjects	4.03 (244)	3.51 (58)		51.99	1,300	<0.001*
SUPERVISORS:						
Shared Subject Matters	4.04 (19)	3.09 (14)	2.17 (2)	19.81	2,32	<0.001**
Islamic Education	---- (0)	2.28 (1)	1.84 (11)			
Arts Subjects	4.09 (18)	3.32 (6)	---- (0)	18.08	1,22	<0.001*
Science Subjects	4.05 (21)	3.29 (7)	---- (0)	13.56	1,26	0.001*
ADMINISTRATORS:	4.16 (61)	3.88 (13)		5.18	1,72	0.026*

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

satisfaction to the methods of instruction used in the secondary school in Oman. Among supervisors of the arts

[F(1,22) < 1] and supervisors of the sciences [F(1,26) < 1], no statistically significant differences were found in the subjects' satisfaction with the methods of instruction as a function of the subjects' attitudes toward the importance of student-centered curriculum (Table 58).

Statistically significant differences in the responses given to student assessment technique items as a function of attitude toward Factor III were found among all teacher groups [shared subject matters $F(1,290) = 55.04$, $p < 0.001$; arts $F(1,206) = 22.75$, $p < 0.001$; and sciences $F(1,297) = 12.64$, $p < 0.001$] and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 7.85$, $p = 0.002$] (Table 58). Among these educators, those who rated a student-centered curriculum as very important also gave the greatest level of satisfaction with the student assessment techniques. Among supervisors of the arts [$F(1,22) = 3.95$, $p = 0.060$], supervisors of the sciences [$F(1,26) < 1$], and administrators [$F(1,72) = 3.40$, $p = 0.070$], no statistically significant differences were found between the level of satisfaction given to the student assessment techniques and the subjects' attitudes toward a student-centered curriculum (Table 58).

Table 58: Teacher, supervisor, and administrator response to Classroom Activity items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
Methods of Instruction Items						
TEACHERS:						
Shared Subject Matters	3.68 (203)	3.16 (89)		45.44	1,290	<0.001*
Arts Subjects	3.65 (170)	3.23 (38)		10.26	1,206	0.002*
Science Subjects	3.53 (241)	3.30 (58)		6.24	1,297	0.013*
SUPERVISORS:						
Shared Subject Matters	3.77 (18)	3.01 (14)	2.59 (2)	7.41	2,31	0.002**
Islamic Education	---- (0)	2.45 (1)	2.27 (11)			
Arts Subjects	3.42 (18)	3.17 (6)	---- (0)	<1	1,22	
Science Subjects	3.49 (21)	3.45 (7)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.77 (61)	3.31 (13)		7.99	1,72	0.006*
Student Assessment Items						
TEACHERS:						
Shared Subject Matters	3.83 (203)	3.35 (89)		55.04	1,290	<0.001*
Arts Subjects	3.96 (170)	3.54 (38)		22.75	1,206	<0.001*
Science Subjects	3.77 (241)	3.52 (58)		12.64	1,297	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.76 (18)	2.98 (14)	3.31 (2)	7.85	2,31	0.002**
Islamic Education	---- (0)	1.68 (1)	2.18 (11)			
Arts Subjects	3.61 (18)	3.07 (6)	---- (0)	3.95	1,22	0.060
Science Subjects	3.63 (21)	3.48 (7)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.74 (61)	3.47 (13)		3.40	1,72	0.070

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

3. Resources

Statistically significant differences in the responses given to staff items as a function of attitude toward Factor III were found among teachers only [shared subject matters $F(1,286) = 12.92$, $p < 0.001$; arts $F(1,205) = 15.23$, $p < 0.001$; and sciences $F(1,297) = 4.34$, $p = 0.038$]. Those teachers that rated a student-centered curriculum as very important showed the greatest level of satisfaction to the staff items (Table 59). Among supervisors of the arts [$F(1,22) = 2.39$, $p = 0.136$], supervisors of the sciences $F(1,26) < 1$], and administrators [$F(1,72) = 2.48$, $p = 0.120$], no statistically significant differences in the satisfaction with staff were found as a function of the subjects' attitudes toward using a student-centered curriculum (Table 59). And among supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 4.33$, $p = 0.022$], no reliable statistically significant group differences were found upon further analysis using the Scheffe post-hoc comparison of the group means (Tables 59).

Statistically significant differences in the responses given to facilities, materials, and equipment items as a function of attitude toward Factor III were found among teachers of the shared subject matters [$F(1,286) = 17.53$, $p < 0.001$], teachers of the arts [$F(1,205) = 10.41$, $p = 0.002$], and supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 4.24$, $p = 0.023$]

(Table 59). Among these educators, those who rated a student-centered curriculum as very important also gave the greatest level of satisfaction with the facilities, materials, and equipment. Among teachers of the sciences [$F(1,297) = 2.67$, $p = 0.103$], supervisors of the arts [$F(1,22) = 3.29$, $p = 0.083$], supervisors of the sciences [$F(1,26) < 1$], and administrators [$F(1,72) = 1.54$, $p = 0.218$], no statistically significant differences were found in the level of satisfaction with the facilities, materials, and equipment as a function of the subjects' attitudes toward a student-centered curriculum (Table 59).

Statistically significant differences in the responses given to textbook items as a function of attitude toward Factor III were found among all teacher groups [shared subject matters $F(1,286) = 15.37$, $p < 0.001$; arts $F(1,202) = 7.35$, $p = 0.007$; and sciences $F(1,295) = 12.98$, $p < 0.001$] and supervisors of the arts [$F(1,22) = 5.18$, $p = 0.033$] (Table 59). Among these educators, those who rated a student-centered curriculum as very important also gave the greatest level of satisfaction with the textbooks. Among supervisors of the sciences [$F(1,26) < 1$], no statistically significant group differences in satisfaction with textbooks were found as a function of the subjects' attitudes toward using a student-centered curriculum (Table 59). Among supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 4.39$, $p = 0.021$], no reliable

statistically significant group differences were found upon subsequent Scheffe probe of this significant one-way ANOVA.

Statistically significant differences in the responses given to teachers' manual items as a function of attitude toward Factor III were found among teachers of the shared subject matters [$F(1,272) = 35.90$, $p < 0.001$], teachers of the arts [$F(1,203) = 9.49$, $p = 0.002$], and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 8.28$, $p = 0.001$] (Table 59). Among these educators, those who rated the use of a student-centered curriculum as very important also gave the greatest level of satisfaction to the teachers manual. Among teachers of the sciences [$F(1,288) < 1$], supervisors of the arts [$F(1,22) = 1.68$, $p = 0.209$], and supervisors of the sciences [$F(1,26) < 1$], no statistically significant differences were found between the level of satisfaction given to the teachers' manual and the subjects' attitude toward using a student-centered curriculum (Table 59).

importance of a student centered curriculum.

	ATTITUDE: STRONGLY AGREE $\bar{Y}$ (n)	NEUTRAL $\bar{Y}$ (n)	STRONGLY DISAGREE $\bar{Y}$ (n)	F	df	p
Human Resources Staff Items						
TEACHERS:						
Shared Subject Matters	3.48 (201)	3.18 (87)		12.92	1,286	<0.001*
Arts Subjects	3.49 (169)	2.92 (38)		15.23	1,205	<0.001*
Science Subjects	3.27 (242)	3.04 (57)		4.34	1,297	0.038*
SUPERVISORS:						
Shared Subject Matters	3.68 (19)	3.27 (14)	2.47 (2)	4.33	2,32	0.022*
Islamic Education	---- (0)	2.40 (1)	2.37 (11)			
Arts Subjects	3.08 (18)	2.64 (6)	---- (0)	2.39	1,22	0.136
Science Subjects	3.27 (21)	3.44 (7)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.55 (61)	3.26 (13)		2.48	1,72	0.120
Physical Resources Equipment, Facilities, and Materials Items						
TEACHERS:						
Shared Subject Matters	3.40 (201)	3.00 (87)		17.53	1,286	<0.001*
Arts Subjects	3.07 (169)	2.58 (38)		10.41	1,205	0.002*
Science Subjects	3.08 (242)	2.90 (57)		2.67	1,297	0.103
SUPERVISORS:						
Shared Subject Matters	3.67 (19)	3.05 (14)	2.79 (2)	4.24	2,32	0.023**
Islamic Education	---- (0)	2.65 (1)	2.64 (11)			
Arts Subjects	3.12 (18)	2.68 (6)	---- (0)	3.29	1,22	0.083
Science Subjects	3.28 (21)	3.10 (7)	---- (0)	<1	1,26	
ADMINISTRATORS:	3.32 (61)	3.04 (13)		1.54	1,72	0.218
Textbook Items						
TEACHERS:						
Shared Subject Matters	3.65 (201)	3.32 (87)		15.37	1,286	<0.001*
Arts Subjects	3.76 (166)	3.42 (38)		7.35	1,202	0.007*
Science Subjects	3.56 (241)	3.22 (56)		12.98	1,295	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.83 (19)	3.46 (14)	2.70 (2)	4.39	2,32	0.021*
Islamic Education	---- (0)	1.72 (1)	2.06 (11)			
Arts Subjects	3.60 (18)	2.94 (6)	---- (0)	5.18	1,22	0.033*
Science Subjects	3.61 (21)	3.46 (7)	---- (0)	<1	1,26	
Teacher's Manual Items						
TEACHERS:						
Shared Subject Matters	3.56 (191)	3.08 (83)		35.90	1,272	<0.001*
Arts Subjects	3.37 (167)	2.89 (38)		9.49	1,203	0.002*
Science Subjects	3.14 (235)	3.05 (55)		<1	1,288	
SUPERVISORS:						
Shared Subject Matters	3.78 (18)	3.23 (14)	2.50 (2)	8.28	2,31	0.001**
Islamic Education	---- (0)	2.07 (1)	2.37 (11)			
Arts Subjects	3.21 (18)	2.88 (6)	---- (0)	1.68	1,22	0.209
Science Subjects	3.26 (21)	3.09 (7)	---- (0)	<1	1,26	

*Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: + = no two groups with five (5) or more subjects to be statistically significant; ** = strongly agree to differ significantly from neutral.

D. Factor IV: The importance of integrating the students' social and cultural heritage

1. Theory

Statistically significant differences in the responses given to Omani educational objective items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,295) = 90.17$, $p < 0.001$; arts $F(1,209) = 107.29$, $p < 0.001$; and sciences $F(1,302) = 71.09$, $p < 0.001$], all supervisor groups assessed [shared subject matters in Arabic and English Languages $F(1,33) = 105.95$, $p < 0.001$; arts $F(1,22) = 7.66$, $p = 0.011$; and sciences $F(1,26) = 11.84$, $p = 0.002$], and administrators [$F(1,72) = 9.92$, $p = 0.002$] (Table 60). Among these educators, those who rated the importance of integrating the students' social and cultural heritage into the curriculum as very important also gave the greatest agreement to the Omani educational objectives (Table 60).

2. Process and Practice

Statistically significant differences in the responses given to method of instruction items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,293) = 22.49$, $p < 0.001$; arts $F(1,208) = 27.99$, $p < 0.001$; and sciences $F(1,296) = 16.96$, $p < 0.001$], supervisors of the shared subject matters

Table 60: Teacher, supervisor, and administrator response to Educational Objective items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	4.08 (179)	3.44 (118)		90.17	1,295	<0.001*
Arts Subjects	4.30 (166)	3.57 (45)		107.29	1,209	<0.001*
Science Subjects	4.11 (192)	3.61 (112)		71.09	1,302	<0.001*
SUPERVISORS:						
Shared Subject Matters	4.17 (19)	2.82 (16)	---- (0)	106.95	1,33	<0.001*
Islamic Education	---- (0)	2.57 (2)	1.74 (10)			
Arts Subjects	4.06 (17)	3.51 (7)	---- (0)	7.66	1,22	0.011*
Science Subjects	4.12 (17)	3.47 (11)	---- (0)	11.84	1,26	0.002*
ADMINISTRATORS:	4.20 (55)	3.87 (19)		9.92	1,72	0.002*

^Only supervisors were assessed at three levels of this variable.
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

in Arabic and English Languages [$F(1,32) = 11.24$, $p = 0.002$], supervisors of the sciences [$F(1,26) = 6.47$, $p = 0.017$], and administrators [$F(1,72) = 14.26$, $p < 0.001$] (Table 61). Among these educators, those who rated the importance of integrating the students' social and cultural heritage into the curriculum as very important also gave the

greatest level of satisfaction to the methods of instruction used at the Secondary school level in Oman. Among supervisors of the arts [$F(1,22) < 1$], no statistically significant differences were found in the subjects' satisfaction with the methods of instruction and the subjects' attitude toward the integration of student social and cultural heritage into the curriculum (Table 61).

Statistically significant differences in the responses given to student assessment technique items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,293) = 40.28$, $p < 0.001$; arts $F(1,208) = 43.18$, $p < 0.001$; and sciences $F(1,296) = 17.05$, $p < 0.001$], supervisors of the shared subject matters in Arabic and English Languages [$F(1,32) = 14.41$, $p < 0.001$], supervisors of the arts [$F(1,22) = 6.59$, $p = 0.018$], and administrators [$F(1,72) = 10.17$, $p = 0.002$] (Table 61). Among these educators, those who indicated that the integration of the students' social and cultural heritage was very important also gave the greatest level of satisfaction with the student assessment techniques (Table 61). Among supervisors of the sciences [$F(1,26) = 2.20$, $p = 0.151$], no statistically significant difference was found in the level of satisfaction given to the student assessment techniques and the subjects' attitude toward the integration of the students' social and cultural heritage into the curriculum (Table 61).

Table 61: Teacher, supervisor, and administrator response to Classroom Activity items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
Methods of Instruction Items						
TEACHERS:						
Shared Subject Matters	3.66 (177)	3.29 (118)		22.49	1,293	<0.001*
Arts Subjects	3.71 (165)	3.09 (45)		27.99	1,208	<0.001*
Science Subjects	3.60 (187)	3.30 (111)		16.96	1,296	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.74 (18)	2.99 (16)	---- (0)	11.24	1,32	0.002*
Islamic Education	---- (0)	2.82 (2)	2.18 (10)			
Arts Subjects	3.40 (17)	3.26 (7)	---- (0)	<1	1,22	
Science Subjects	3.74 (17)	3.09 (11)	---- (0)	6.47	1,26	0.017*
ADMINISTRATORS:	3.82 (55)	3.31 (19)		14.26	1,72	<0.001*
Student Assessment Items						
TEACHERS:						
Shared Subject Matters	3.83 (177)	3.42 (118)		40.28	1,293	<0.001*
Arts Subjects	3.99 (165)	3.47 (45)		43.18	1,208	<0.001*
Science Subjects	3.81 (187)	3.58 (111)		17.05	1,296	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.75 (18)	3.03 (16)	---- (0)	14.41	1,32	<0.001*
Islamic Education	---- (0)	2.68 (2)	2.03 (10)			
Arts Subjects	3.66 (17)	3.03 (7)	---- (0)	6.59	1,22	0.018*
Science Subjects	3.72 (17)	3.40 (11)	---- (0)	2.20	1,26	0.150
ADMINISTRATORS:	3.79 (55)	3.41 (19)		10.17	1,72	0.002*

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

3. Resources

Statistically significant differences in the responses given to staff items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,288) = 17.44$, $p < 0.001$; art $F(1,207) = 23.11$, $p < 0.001$; and sciences $F(1,296) = 6.64$, $p = 0.011$], supervisors of the shared subject matters in Arabic dn English language [$F(1,33) = 13.03$, $p = 0.001$], and administrators [$F(1,72) = 8.91$, $p = 0.004$] (Table 62). Among these educators, those who indicated that the integration of the students' social and cultural heritage was very important also gave the greatest level of satisfaction with the staff (Table 62). Among supervisors of the arts [$F(1,22) = 1.08$, $p = 0.310$] and supervisors of the sciences [$F(1,26) = 1.89$, $p = 0.182$], no statistically significant differences in the level of satisfaction given to with staff items were found as a function of the subjects' attitude toward the integration of the students' social and cultural heritage into the curriculum (Table 62).

Statistically significant differences in the responses given to facilities, materials, and equipment items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,288) = 19.28$, $p < 0.001$; arts $F(1,207) = 11.66$, $p < 0.001$; and sciences $F(1,296) = 7.00$, $p = 0.009$], supervisors of the shared subject matters in Arabic and English Languages [$F(1,33) =$

13.23, $p < 0.001$], supervisors of the sciences [$F(1,26) = 7.31$, $p = 0.012$], and administrators [$F(1,72) = 8.21$, $p = 0.006$] (Table 62). Among these educators, those that rated the integration of the students' social and cultural heritage as very important also gave the greatest level of satisfaction with the availability and quality of the facilities, materials, and equipment (Table 62). Among supervisors of the arts [$F(1,22) = 1.39$, $p = 0.251$], no statistically significant differences in satisfaction with the facilities, materials, and equipment were found as a function of the subjects' attitude toward the importance of integrating the students' social and cultural heritage into the curriculum (Table 62).

Statistically significant differences in the responses given to textbook items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,288) = 20.54$, $p < 0.001$; arts $F(1,203) = 29.44$, $p < 0.001$; and sciences $F(1,294) = 15.28$, $p < 0.001$] and all supervisors groups assessed [shared subject matters in Arabic and English Languages $F(1,33) = 9.13$, $p = 0.005$; arts $F(1,22) = 6.67$, $p = 0.017$; and sciences $F(1,26) = 10.48$, $p = 0.003$] (Table 62), finding those who rated the importance of integrating the students' social and cultural heritage into the curriculum as very important to give the greatest level of satisfaction to the textbooks.

Table 62: Teacher, supervisor, and administrator responses to Human and Physical Resource, Textbook, and Teacher's Manual items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE: STRONGLY AGREE $\bar{Y}$ (n)	NEUTRAL $\bar{Y}$ (n)	STRONGLY DISAGREE* $\bar{Y}$ (n)	F	df	p
Human Resources Staff Items						
TEACHERS:						
Shared Subject Matters	3.50 (176)	3.18 (114)		17.44	1,288	<0.001*
Arts Subjects	3.52 (164)	2.87 (45)		23.11	1,207	<0.001*
Science Subjects	3.30 (188)	3.09 (110)		6.64	1,296	0.011*
SUPERVISORS:						
Shared Subject Matters	3.77 (19)	3.05 (16)	---- (0)	13.03	1,33	0.001*
Islamic Education	---- (0)	2.95 (2)	2.26 (10)			
Arts Subjects	3.05 (17)	2.77 (7)	---- (0)	1.08	1,22	0.310
Science Subjects	3.47 (17)	3.07 (11)	---- (0)	1.89	1,26	0.182
ADMINISTRATORS:	3.61 (55)	3.16 (19)		8.91	1,72	0.004*
Physical Resources Equipment, Facilities, and Materials Items						
TEACHERS:						
Shared Subject Matters	3.43 (176)	3.03 (114)		19.29	1,288	<0.001*
Arts Subjects	3.09 (164)	2.61 (45)		11.66	1,207	<0.001*
Science Subjects	3.13 (188)	2.89 (110)		7.00	1,296	0.009*
SUPERVISORS:						
Shared Subject Matters	3.72 (19)	2.95 (16)	---- (0)	13.23	1,33	<0.001*
Islamic Education	---- (0)	3.03 (2)	2.56 (10)			
Arts Subjects	3.09 (17)	2.81 (7)	---- (0)	1.39	1,22	0.251
Science Subjects	3.50 (17)	2.87 (11)	---- (0)	7.31	1,26	0.012*
ADMINISTRATORS:	3.41 (55)	2.87 (19)		8.21	1,72	0.006*
Textbook Items						
TEACHERS:						
Shared Subject Matters	3.67 (177)	3.32 (113)		20.54	1,288	<0.001*
Arts Subjects	3.82 (161)	3.22 (44)		29.44	1,203	<0.001*
Science Subjects	3.61 (187)	3.31 (109)		15.28	1,294	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.88 (19)	3.30 (16)	---- (0)	9.13	1,33	0.005*
Islamic Education	---- (0)	2.58 (2)	1.94 (10)			
Arts Subjects	3.64 (17)	2.94 (7)	---- (0)	6.67	1,22	0.017*
Science Subjects	3.78 (17)	3.26 (11)	---- (0)	10.48	1,26	0.003*
Teacher's Manual Items						
TEACHERS:						
Shared Subject Matters	3.49 (176)	3.25 (103)		8.68	1,277	0.004*
Arts Subjects	3.42 (163)	2.74 (43)		22.10	1,204	<0.001*
Science Subjects	3.22 (185)	2.99 (105)		7.03	1,288	0.008*
SUPERVISORS:						
Shared Subject Matters	3.74 (19)	3.13 (15)	---- (0)	11.19	1,32	0.002*
Islamic Education	---- (0)	2.70 (2)	2.27 (10)			
Arts Subjects	3.30 (17)	2.71 (7)	---- (0)	6.85	1,22	0.016*
Science Subjects	3.30 (17)	2.78 (11)	---- (0)	12.12	1,26	0.002*

*Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Statistically significant differences in the responses given to teachers' manual items as a function of attitude toward Factor IV were found among all teacher groups [shared subject matters $F(1,277) = 8.68$, $p = 0.004$; arts $F(1,204) = 22.10$, $p < 0.001$; and sciences $F(1,288) = 7.03$, $p = 0.008$] and all supervisor groups assessed [shared subject matters in Arabic and English Languages $F(1,32) = 11.19$, $p = 0.002$; arts $F(1,22) = 6.85$, $p = 0.016$; and sciences $F(1,26) = 12.12$, $p = 0.002$] (Table 62). Those who rated the integration of the students' social and cultural heritage as very important gave the greatest level of satisfaction to the teachers' manuals (Table 62).

E. Factor V: The importance of developing thinking abilities

1. Theory

Statistically significant differences in the responses given to Omani educational objective items as a function of attitude toward Factor V were found among all teacher groups [shared subject matters $F(1,257) = 113.95$, $p < 0.001$; arts $F(1,203) = 46.16$, $p < 0.001$; and sciences $F(1,286) = 64.71$, $p < 0.001$], all supervisor groups assessed [shared subject matters in Arabic and English Languages $F(2,31) = 32.28$, $p < 0.001$; arts $F(1,22) = 5.57$, $p = 0.028$; and sciences $F(1,25) = 13.73$, $p = 0.001$], and administrators [$F1,72) = 4.05$, $p = 0.048$] (Table 63). Among these educators, those who rated he development of thinking abilities as very important also

gave the greatest level of agreement to the Omani educational objectives (Table 63).

Table 63: Teacher, supervisor, and administrator response to Educational Objective items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	4.15 (183)	3.44 (76)		113.95	1,257	<0.001*
Arts Subjects	4.31 (143)	3.85 (62)		46.16	1,203	<0.001*
Science Subjects	4.09 (222)	3.60 (66)		64.71	1,286	<0.001*
SUPERVISORS:						
Shared Subject Matters	4.10 (20)	2.94 (10)	2.57 (4)	32.28	2,31	<0.001**
Islamic Education	---- (0)	2.19 (3)	1.78 (9)			
Arts Subjects	4.07 (15)	3.61 (9)	---- (0)	5.57	1,22	0.028*
Science Subjects	4.10 (17)	3.40 (10)	---- (0)	13.73	1,25	0.001*
ADMINISTRATORS:	4.15 (62)	3.89 (12)		4.05	1,72	0.048*

^Only supervisors were assessed at three levels of this variable.
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant
The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

2. Process and Practice

Statistically significant differences in the responses given to method of instruction items as a function of

attitude toward Factor V were found among all teacher groups [shared subject matters $F(1,255) = 31.41$, $p < 0.001$; arts $F(1,202) = 13.78$, $p < 0.001$; and sciences $F(1,283) = 16.10$, $p < 0.001$], supervisors of the shared subject matters in Arabic and English Languages [$F(2,30) = 9.10$, $p < 0.001$], supervisors of the arts [$F(1,22) = 6.96$, $p = 0.015$], and administrators [$F(1,72) = 6.01$, $p = 0.017$] (Table 64). Among these educators, those who rated the development of thinking abilities as very important also gave the greatest level of satisfaction to the methods of instruction used in the Secondary school in Oman. Among supervisors of the sciences [$F(1,25) < 1$], no statistically significant differences were found between the subjects' levels of satisfaction with the methods of instruction used in Oman and the subjects' attitudes toward the importance of developing thinking abilities (Table 64).

Statistically significant differences in the responses given to student assessment technique items as a function of attitude toward Factor V were found among all teacher groups [shared subject matters $F(1,255) = 45.58$, $p < 0.001$; arts $F(1,202) = 12.76$, $p < 0.001$; and sciences $F(1,283) = 18.70$, $p < 0.001$], supervisors of the shared subject matters in Arabic and English Languages [$F(2,30) = 7.05$, $p = 0.003$], and supervisors of the arts [$F(1,22)$ 6.43, $p = 0.019$] (Table 64). Among these educators, those who indicated that the development of thinking abilities was very important also

Table 64: Teacher, supervisor, and administrator response to Classroom Activity items as a function of Factor 9: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
Methods of Instruction Items						
TEACHERS:						
Shared Subject Matters	3.70 (181)	3.22 (76)		31.41	1,255	<0.001*
Arts Subjects	3.71 (142)	3.30 (62)		13.78	1,202	<0.001*
Science Subjects	3.58 (220)	3.23 (65)		16.10	1,283	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.77 (19)	3.05 (10)	2.55 (4)	9.10	2,30	<0.001**
Islamic Education	---- (0)	2.30 (3)	2.28 (9)			
Arts Subjects	3.59 (15)	2.98 (9)	---- (0)	6.96	1,22	0.015*
Science Subjects	3.52 (17)	3.28 (10)	---- (0)	<1	1,25	
ADMINISTRATORS:	3.76 (62)	3.34 (12)		6.01	1,72	0.017*
Student Assessment Items						
TEACHERS:						
Shared Subject Matters	3.86 (181)	3.39 (76)		45.58	1,255	<0.001*
Arts Subjects	3.98 (142)	3.70 (62)		12.76	1,202	<0.001*
Science Subjects	3.81 (220)	3.53 (65)		18.70	1,283	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.74 (19)	2.97 (10)	3.09 (4)	7.05	2,30	0.003**
Islamic Education	---- (0)	1.91 (3)	2.21 (9)			
Arts Subjects	3.69 (15)	3.11 (9)	---- (0)	6.43	1,22	0.019*
Science Subjects	3.65 (17)	3.42 (10)	---- (0)	1.09	1,25	0.307
ADMINISTRATORS:	3.73 (62)	3.47 (12)		3.08	1,72	0.084

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

gave the greatest level of satisfaction with the student assessment techniques. Among supervisors of the sciences [$F(1,25) = 1.09$, $p = 0.307$] and administrators [$F(1,72) = 3.08$, $p = 0.084$], no statistically significant differences were found in the levels of satisfaction given to student assessment technique items and the subjects' attitudes toward the importance of developing thinking abilities (Table 64).

3. Resources

Statistically significant differences in the responses given to staff items as a function of attitude toward Factor V were found among all teacher groups [shared subject matters $F(1,254) = 7.80$, $p = 0.006$; arts $F(1,201) = 14.56$, $p < 0.001$; and sciences $F(1,283) = 6.94$, $p = 0.009$] and administrators [$F(1,72) = 4.55$, $p = 0.036$] (Table 65). Among these educators, those who indicated that the development of thinking abilities was very important also gave the greatest level of satisfaction with the staff. Among supervisors of the arts [$F(1,22) = 3.64$, $p = 0.070$] and sciences [$F(1,25) < 1$], no statistically significant differences in the level of satisfaction given to staff items were found as a function of the subjects' attitude toward the importance of developing thinking abilities (Table 65). Among shared subject matters in Arabic and English Languages [$F(2,31) = 8.75$, $p = 0.001$], no reliable statistically significant group differences were obtained in

the post-hoc Scheffe probe of this significant one-way ANOVA (Table 65).

Statistically significant differences in the responses given to facilities, materials, and equipment items as a function of attitude toward Factor V were found among all teacher groups [shared subject matters $F(1,254) = 6.28$, $p = 0.013$; arts $F(1,201) = 13.91$, $p < 0.001$; and sciences $F(1,283) = 12.61$, $p < 0.001$] and administrators [$F(1,72) = 5.40$, $p = 0.023$] (Table 65). Among these educators, those that rated the development of student thinking abilities as very important also gave the greatest level of satisfaction to the facilities, materials, and equipment (Table 65) available in Oman's secondary school system. Among supervisors of the arts [$F(1,22) = 2.01$, $p = 0.171$] and sciences [$F(1,25) < 1$], no statistically significant differences in satisfaction with the facilities, materials, and equipment were found as a function of the subjects' attitude toward the importance developing thinking abilities (Table 65). Among shared subject matters in Arabic and English Languages [$F(2,31) = 4.61$, $p = 0.018$], no reliable statistically significant group differences were found in the Scheffe probe of this significant one-way ANOVA (Table 65).

Statistically significant differences in the responses given to textbook items as a function of attitude toward Factor V were found among all teacher groups [shared subject

matters $F(1,255) = 25.56$, $p < 0.001$; arts $F(1,199) = 9.57$, $p = 0.002$; and sciences $F(1,282) = 17.85$, $p < 0.001$] and supervisors of the arts [$F(1,22) = 6.90$, $p = 0.015$] (Table 65). Among these educators, those who rated the development of thinking abilities as very important also gave the greatest level of satisfaction to the textbooks items. Among supervisors of the sciences [$F(1,25) = 4.10$, $p = 0.054$], no statistically significant group differences were found in the responses given to textbook items as a function of their attitude toward Factor V. Among supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 3.92$, $p = 0.030$], no reliable statistically significant group differences were found by Scheffe probe of this significant one-way ANOVA (Tables 65).

Statistically significant differences in the responses given to teachers manual items as a function of attitude toward Factor V were found among all teacher groups [shared subject matters $F(1,254) = 14.88$, $p < 0.001$; arts $F(1,200) = 33.08$, $p < 0.001$; and sciences $F(1,281) = 7.37$, $p = 0.007$] (Table 65), finding those who rated the development of thinking abilities as very important also gave the greatest level of satisfaction with the teachers manuals. Among supervisors of the arts [$F(1,22) = 1.97$, $p = 0.175$] and supervisors of the sciences [$F(1,25) = 2.66$, $p = 0.115$], no statistically significant group differences in the responses given to teachers' manual items were found as a function of

Table 48: Teacher, supervisor, and administrator response to Human and Physical Resource, Textbook and Teacher's Manual items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE: STRONGLY AGREE $\bar{Y}$ (n)	NEUTRAL $\bar{Y}$ (n)	STRONGLY DISAGREE* $\bar{Y}$ (n)	F	df	p
Human Resources Staff Items						
TEACHERS:						
Shared Subject Matters	3.49 (180)	3.25 (76)		7.80	1,254	0.006*
Arts Subjects	3.53 (141)	3.06 (62)		14.56	1,201	<0.001*
Science Subjects	3.28 (221)	3.03 (64)		6.94	1,283	0.009*
SUPERVISORS:						
Shared Subject Matters	3.76 (20)	3.30 (10)	2.64 (4)	8.75	2,31	0.001+
Islamic Education	---- (0)	2.53 (3)	2.32 (9)			
Arts Subjects	3.14 (15)	2.68 (9)	---- (0)	3.64	1,22	0.070
Science Subjects	3.27 (17)	3.25 (10)	---- (0)	<1	1,25	
ADMINISTRATORS:	3.54 (62)	3.17 (12)		4.54	1,72	0.036*
Physical Resources Equipment, Facilities, and Materials Items						
TEACHERS:						
Shared Subject Matters	3.39 (180)	3.13 (76)		6.28	1,254	0.013*
Arts Subjects	3.12 (141)	2.64 (62)		13.91	1,201	<0.001*
Science Subjects	3.12 (221)	2.75 (64)		12.16	1,283	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.64 (20)	3.18 (10)	2.67 (4)	4.61	2,31	0.018+
Islamic Education	---- (0)	2.67 (3)	2.63 (9)			
Arts Subjects	3.13 (15)	2.8 (9)	---- (0)	2.01	1,22	0.171
Science Subjects	3.30 (17)	3.07 (10)	---- (0)	<1	1,25	
ADMINISTRATORS:	3.34 (62)	2.83 (12)		5.40	1,72	0.023*
Textbook Items						
TEACHERS:						
Shared Subject Matters	3.72 (181)	3.29 (76)		25.56	1,255	<0.001*
Arts Subjects	3.80 (139)	3.47 (62)		9.57	1,199	0.002*
Science Subjects	3.61 (221)	3.23 (63)		17.85	1,282	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.84 (20)	3.48 (10)	3.0 (4)	3.92	2,31	0.030+
Islamic Education	---- (0)	1.97 (3)	2.05 (9)			
Arts Subjects	3.69 (15)	3.02 (9)	---- (0)	6.90	1,22	0.015*
Science Subjects	3.69 (17)	3.32 (10)	---- (0)	4.10	1,25	0.054+
Teacher's Manual Items						
TEACHERS:						
Shared Subject Matters	3.52 (181)	3.19 (75)		14.88	1,254	<0.001*
Arts Subjects	3.50 (141)	2.78 (61)		33.08	1,200	<0.001*
Science Subjects	3.21 (220)	2.93 (63)		7.37	1,281	0.007*
SUPERVISORS:						
Shared Subject Matters	3.73 (20)	3.32 (10)	2.64 (4)	8.02	2,31	0.002+
Islamic Education	---- (0)	2.21 (3)	2.38 (9)			
Arts Subjects	3.25 (15)	2.93 (9)	---- (0)	1.97	1,22	0.175
Science Subjects	3.3 (17)	2.94 (10)	---- (0)	2.66	1,25	0.115

*Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group scores showed: + = no two groups with five (5) or more subjects to be statistically significant.

the subjects' attitude toward Factor V. Among supervisors of the shared subject matters in Arabic and English Languages [F(2,31) = 8.02, p = 0.002], no reliable statistically significant group differences were found upon subsequent probe of this significant one-way ANOVA (Table 65).

VI. A COMPARISON BY DEMOGRAPHIC, ACADEMIC, AND TEACHING BACKGROUND OF THE RESPONSES GIVEN TO PROCESS OF CURRICULUM DEVELOPMENT AND CURRICULUM CONTENT ITEMS BY TEACHERS AND/OR SUPERVISORS: ONE-WAY ANOVA

Teacher and supervisor responses to questionnaire items on the process of curriculum development (Part II Section A part 1: PROCESS OF CURRICULUM DEVELOPMENT) and the specific curriculum content of each of the twelve subject matter areas (Part II Section A part 2: SPECIFIC CURRICULUM CONTENT) were assessed in light of their demographic background (gender, nationality, or district of employment), academic background (educational preparation, in-service training time, place of in-service training, or workshop attendance), and teaching experience (number of years in total or number of years in Oman). The source and development of each of these non-manipulated independent variables were discussed previously (see pages 242 and 243).

For statistical analysis of the responses given to the process of curriculum development items, teachers and supervisors were subdivided into general areas of instruction: Arts (History, Civic Education, Geography and

Contemporary Problems, and human cultures), Sciences (mathematics, General Sciences, Chemistry, Physics, and Biology), or shared subject matters (Islamic Education, Arabic Language, and English language) described earlier. Islamic Education supervisors were, upon analysis, separated from Arabic Language and English Language supervisors because their responses to all portions of the questionnaire deviated greatly from the responses given by Arabic Language and English language supervisors.

A statistical analysis of the responses given to specific curriculum content in each of the twelve subject matter areas was performed on the teacher sample only, because only this sample had enough subjects per subject matter area to produce a large enough sample size (> than 5) at 2 or more levels of each independent variable.

Tables 66 through 74 report the number of teachers per subject matter area falling into each response category of each independent variable.

The effect of each independent variable on the responses given by teachers, supervisors, and administrators to sections of the questionnaire addressing CURRICULUM CONTENT are reported below by independent variable and questionnaire section. The statistical analyses of the effect of these independent variables on the subject response to CURRICULUM CONTENT sections of the questionnaire were performed in all cases where the number of subjects per

response category was equal to, or greater than, five in at least two response categories within the independent variable.

Table 66: Sample of teachers by subject matter area and gender.

	GENDER	
	Male	Female
SHARED SUBJECT MATTERS:		
Islamic Education	47	41
Arabic Language	67	50
English Language	64	53
ARTS SUBJECTS:		
History	43	22
Civic Education	24	16
Geography	44	30
Human Culture	24	9
SCIENCE SUBJECTS:		
Mathematics	71	41
General Science	19	12
Chemistry	32	23
Physics	40	17
Biology	31	23

Table 67: Sample of teachers by subject matter area and nationality.

	NATIONALITY	
	Omani	Non-Omani
SHARED SUBJECT MATTERS:		
Islamic Education	18	70
Arabic Language	17	100
English Language	12	104
ARTS SUBJECTS:		
History	4	61
Civic Education	4	36
Geography	9	65
Human Culture	3	30
SCIENCE SUBJECTS:		
Mathematics	6	105
General Science	2	29
Chemistry	4	51
Physics	1	56
Biology	4	49

Table 68: Sample of teachers by subject matter area and district of employment.

	DISTRICT								
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa
SHARED SUBJECT MATTERS:									
Islamic Education	15	15	10	10	8	6	10	10	4
Arabic Language	14	15	15	15	12	9	15	15	7
English Language	14	15	15	15	14	8	15	14	7
ARTS SUBJECTS:									
History	12	12	8	9	5	4	6	7	2
Civic Education	7	5	3	4	4	5	4	5	3
Geography	12	12	9	12	4	5	7	8	5
Human Culture	4	5	5	5	3	2	4	4	1
SCIENCE SUBJECTS:									
Mathematics	15	15	15	13	12	11	14	13	4
General Science	3	3	5	5	2	3	5	4	1
Chemistry	10	10	7	6	6	5	4	6	1
Physics	10	10	7	8	4	4	6	7	1
Biology	9	10	5	9	4	3	7	6	1

Table 69: Sample of teachers by subject matter area and level of education.

	EDUCATIONAL PREPARATION		
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^
SHARED SUBJECT MATTERS:			
Islamic Education	29	42	17
Arabic Language	48	55	14
English Language	43	18	56
ARTS SUBJECTS:			
History	38	22	5
Civic Education	19	13	8
Geography	47	24	3
Human Culture	19	10	3
SCIENCE SUBJECTS:			
Mathematics	92	13	7
General Science	24	7	0
Chemistry	27	25	3
Physics	51	1	5
Biology	35	14	5

^ REFERS TO NON-COLLEGE OR UNIVERSITY DEGREE

Table 70: Sample of teachers by subject matter area and amount of in-service training.

	AMOUNT			
	0 mos	<1 - 3 mos	4 - 12 mos	1 - 2 yrs
SHARED SUBJECT MATTERS:				
Islamic Education	18	42	3	25
Arabic Language	15	83	6	13
English Language	11	46	16	44
ARTS SUBJECTS:				
History	5	46	4	10
Civic Education	5	28	1	6
Geography	10	53	3	8
Human Culture	7	24	1	1
SCIENCE SUBJECTS:				
Mathematics	12	78	6	16
General Science	7	21	1	2
Chemistry	10	35	3	7
Physics	10	38	1	8
Biology	12	32	7	3

Table 71: Sample of teachers by subject matter area and location of in-service training.

	LOCATION	
	In Oman	Outside of Oman
SHARED SUBJECT MATTERS:		
Islamic Education	28	60
Arabic Language	38	79
English Language	30	87
ARTS SUBJECTS:		
History	10	55
Civic Education	11	29
Geography	11	63
Human Culture	8	25
SCIENCE SUBJECTS:		
Mathematics	24	88
General Science	9	22
Chemistry	9	46
Physics	11	46
Biology	15	39

Table 72: Sample of teachers by subject matter area and number of workshops attended.

	NUMBER OF WORKSHOPS				
	0	1	2	3	>3
SHARED SUBJECT MATTERS:					
Islamic Education	42	25	7	7	7
Arabic Language	17	27	29	23	21
English Language	21	5	8	9	74
ARTS SUBJECTS:					
History	14	23	13	9	6
Civic Education	13	7	6	8	6
Geography	17	15	13	14	15
Human Culture	11	8	6	5	3
SCIENCE SUBJECTS:					
Mathematics	12	20	29	23	28
General Science	2	7	11	4	7
Chemistry	13	9	17	5	11
Physics	13	9	19	8	8
Biology	8	9	14	11	12

Table 73: Sample of teachers by subject matter area and years of teaching experience.

	NUMBER OF YEARS			
	1-3	4-6	7-10	>10
SHARED SUBJECT MATTERS:				
Islamic Education	17	18	8	45
Arabic Language	13	13	21	70
English Language	13	16	17	71
ARTS SUBJECTS:				
History	3	2	3	57
Civic Education	4	6	4	26
Geography	4	11	13	46
Human Culture	3	4	2	24
SCIENCE SUBJECTS:				
Mathematics	12	9	32	59
General Science	2	4	6	19
Chemistry	4	6	14	31
Physics	2	4	15	36
Biology	7	4	8	35

Table 74: Sample of teachers by subject matter area and years of teaching experience in Oman.

	NUMBER OF YEARS			
	1-3	4-6	7-10	>10
SHARED SUBJECT MATTERS:				
Islamic Education	57	14	3	14
Arabic Language	73	18	14	12
English Language	46	42	24	5
ARTS SUBJECTS:				
History	40	17	5	3
Civic Education	22	9	5	4
Geography	47	19	7	1
Human Culture	24	7	0	2
SCIENCE SUBJECTS:				
Mathematics	65	32	7	8
General Science	21	5	3	2
Chemistry	34	14	5	2
Physics	47	5	5	0
Biology	30	10	6	8

A. Gender

1. Process of Curriculum Development

Table 75 presents the results obtained from the analyses of teacher response to process of curriculum development items by gender. Less than 5 female supervisors of either the shared subject matters in Arabic and English Languages, Islamic Education, arts, or sciences were sampled and consequently no comparison with male supervisors were possible. However, the mean responses given by male and female (where possible) supervisors of each general area of instruction is reported in Table 75.

Gender did not effect the response give by teachers of any subject matter area to questionnaire items addressing the teacher's satisfaction with the process of curriculum development in Oman.

2. Curriculum Content

Differences in the responses given to items on specific curriculum content by male and female teachers of each of the twelve subject matter areas were minimal and statistically different in only two cases. Among mathematics teachers [$F(1,94) = 8.97, p = 0.004$], females [mean response (+/- s.d.) = 3.63 (0.69)] reported statistically greater satisfaction with the second grade literary content in mathematics than did male mathematics teachers [mean response (+/- s.d.) = 3.15 (0.79)]. Male and female mathematics teachers gave similar responses to all

Table 75: Teacher and supervisor response to Curriculum Development items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
TEACHERS:					
Shared Subject Matters	3.00 (176)	3.05 (144)	<1	1,318	
Arts Subjects	2.96 (134)	2.98 (77)	<1	1,209	
Science Subjects	2.97 (193)	3.09 (116)	1.74	1,307	0.188
SUPERVISORS:					
Shared Subject Matters	3.14 (31)	2.52 (4)			
Islamic Education	2.45 (12)	---- (0)			
Arts Subjects	2.82 (21)	3.00 (2)			
Science Subjects	3.12 (26)	2.97 (2)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

other mathematics curriculum content areas, including general concepts, math construction and procedures, learning and teaching math, math concepts in 1st, 2nd, and 3rd grade, and second grade Arts. Among chemistry teachers, males [mean response (+/- s.d.) = 2.81 (0.82)] reported statistically greater satisfaction than females [mean response (+/- s.d.) = 2.28 (0.85)] on the 1st unit in first grade chemistry [$F(1,49) = 4.91$, $p = 0.031$]. Male and female chemistry teachers reported similar levels of satisfaction with all other curriculum content areas in chemistry, including concepts taught in 1st grade units 2

through 7, second grade units 1 through 6, third grade units 1 through 7, and new concepts in third grade.

The mean responses given by male and female teachers of each subject matter area to the specific curriculum content in their area are reported in Tables 76 through 87 by subject matter area and topic of curriculum content addressed. Teacher gender did not differentiate the responses given to any specific curriculum content items in Islamic Education, Arabic language, English language, General Sciences, History, Geography, Human culture, Civic education, Physics, or Biology.

Table 76: Islamic Education teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts taught in Islamic Education	3.72 (45)	3.32 (41)	3.33	1,84	0.072

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 77: Arabic Language teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts taught in Arabic Language	3.52 (66)	3.46 (47)	<1	1,111	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 78: English Language teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts taught in English Language	3.16 (64)	3.09 (53)	<1	1,115	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 79: Mathematics teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.66 (71)	3.54 (41)	<1	1,110	
Construction	3.30 (71)	3.15 (41)	<1	1,110	
Procedures	3.46 (70)	3.45 (39)	<1	1,107	
Learning & Teaching	3.40 (70)	3.33 (41)	<1	1,109	
1st G	3.47 (71)	3.38 (41)	<1	1,110	
2nd G	3.62 (70)	3.57 (36)	<1	1,104	
3rd G	3.60 (66)	3.74 (37)	1.56	1,101	0.214
2nd G, Arts Program	3.15 (62)	3.63 (34)	8.97	1,94	0.004*
3rd G, Arts Program	3.20 (67)	3.17 (37)	<1	1,102	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 80: General Science teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.56 (18)	3.62 (12)	<1	1,28	
Science & Scientists	3.80 (13)	3.70 (11)	<1	1,22	
Evolution of Astronomy	4.07 (13)	3.94 (11)	<1	1,22	
Transportation	4.15 (13)	3.64 (11)	2.59	1,22	0.122
Health	3.99 (13)	4.20 (11)	<1	1,22	
Science & world Food Problems	4.20 (13)	3.83 (11)	1.14	1,22	0.298
Oil	4.14 (16)	4.14 (10)	<1	1,24	
Solar Energy	4.14 (16)	3.58 (10)	3.15	1,25	0.089
Nuclear Energy	3.88 (15)	3.44 (10)	1.30	1,23	0.266
Environment & Pollution	4.11 (16)	3.70 (10)	1.96	1,24	0.174
Meteorology & Forecasting	4.08 (16)	3.69 (10)	1.46	1,24	0.238
2nd G, New Concepts	3.94 (11)	3.46 (9)	2.68	1,18	0.119
3rd G, New Concepts	3.91 (15)	3.73 (10)	<1	1,23	

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 81: History teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.66 (43)	3.78 (22)	<1	1,63	
2nd G	4.12 (42)	4.16 (18)	<1	1,58	
3rd G	3.76 (41)	3.79 (20)	<1	1,59	

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 82: Geography teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.72 (43)	3.64 (30)	<1	1,71	
2nd G	3.92 (36)	3.83 (26)	<1	1,60	
3rd G	4.18 (38)	4.11 (23)	<1	1,59	
Contemporary Problems	3.90 (34)	4.19 (20)	2.20	1,52	0.144

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 83: Human Culture teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.71 (24)	3.63 (9)	<1	1,31	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 84: Civic Education teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.76 (24)	3.60 (16)	<1	1,38	
1st G, Omani Society	4.37 (24)	4.48 (16)	<1	1,38	
2nd G, Arabic Society	4.19 (21)	4.08 (12)	<1	1,31	
3rd G, Muslim Nations	4.28 (22)	4.15 (12)	<1	1,32	

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 85: Chemistry teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.51 (32)	3.44 (21)	<1	1,51	
1st G, U1	2.81 (31)	2.28 (20)	4.91	1,49	0.031*
1st G, U2-4	3.53 (31)	3.44 (20)	<1	1,49	
1st G, U7	3.31 (31)	3.18 (20)	<1	1,49	
2nd G, U1	3.74 (29)	3.75 (20)	<1	1,47	
2nd G, U2	3.59 (29)	3.17 (20)	1.39	1,47	0.245
2nd G, U3-6	3.60 (29)	3.41 (20)	1.05	1,47	0.311
3rd G, U1-2	3.78 (31)	3.81 (19)	<1	1,48	
3rd G, U3	3.49 (31)	3.35 (19)	<1	1,48	
3rd G, U5-6	3.60 (31)	3.64 (19)	<1	1,48	
3rd G, U7	3.99 (31)	4.02 (19)	<1	1,48	

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 86: Physics teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General Physics	3.57 (40)	3.71 (17)	<1	1,55	
1st G, Unit 1	3.53 (40)	3.48 (16)	<1	1,54	
1st G, Unit 2	3.80 (40)	3.73 (16)	<1	1,54	
1st G, Unit 3	3.48 (40)	3.25 (16)	<1	1,54	
2nd G, Unit 1	3.64 (40)	3.26 (13)	2.93	1,51	0.093
2nd G, Unit 2	3.48 (40)	3.22 (13)	1.04	1,51	0.314
2nd G, Unit 3	3.58 (40)	3.33 (13)	1.16	1,51	0.287
3rd G, Unit 1	3.74 (40)	3.85 (13)	<1	1,51	
3rd G, Unit 2	3.50 (40)	3.51 (13)	<1	1,51	
3rd G, Unit 3	3.41 (40)	3.48 (13)	<1	1,51	

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 87: Biology teacher response to Curriculum Content items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, Unit 1	3.67 (29)	3.84 (23)	<1	1,50	
1st G, Unit 2	3.62 (29)	3.70 (19)	<1	1,46	
1st G, Unit 3	3.82 (28)	3.84 (19)	<1	1,45	
1st G, Unit 4	3.84 (28)	3.82 (19)	<1	1,45	
1st G, Unit 5	3.79 (28)	3.84 (19)	<1	1,45	
2nd G, Unit 1	4.01 (25)	4.22 (18)	<1	1,41	
2nd G, Unit 2	3.93 (25)	4.11 (18)	<1	1,41	
2nd G, Unit 3	4.11 (25)	4.28 (18)	<1	1,41	
3rd G, Unit 1	4.30 (23)	4.11 (19)	1.07	1,40	0.307
3rd G, Unit 2	4.21 (23)	4.24 (19)	<1	1,40	
3rd G, Unit 3	4.03 (26)	4.02 (19)	<1	1,43	
3rd G, Unit 4	3.89 (26)	3.63 (21)	2.09	1,45	

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

B. Nationality

1. Process of Curriculum Development

Table 88 presents the results obtained from the analyses of teacher response to process of curriculum development items as a function of the teacher's nationality. Fewer than 5 Omani supervisors of either the shared subject matters in Arabic and English Languages, Islamic Education, arts, or sciences were sampled; therefore, no comparison with non-Omani supervisors was possible. However, the mean responses given by Omani (when

possible) and non-Omani supervisors of each general area of instruction are reported in Table 88.

Nationality did not effect teacher response to process of curriculum development items.

Table 88: Teacher and supervisor response to Curriculum Development items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
TEACHERS:					
Shared Subject Matters	2.96 (47)	3.03 (272)	<1	1,317	
Arts Subjects	3.14 (20)	2.95 (191)	<1	1,209	
Science Subjects	3.28 (17)	2.99 (290)	2.42	1,305	0.121
SUPERVISORS:					
Shared Subject Matters	2.69 (3)	3.09 (31)			
Islamic Education	2.45 (2)	2.45 (10)			
Arts Subjects	3.25 (3)	2.77 (20)			
Science Subjects	---- (0)	3.11 (28)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

2. Curriculum Content

Among teachers of General Science, History, Human culture, Civic education, Chemistry, Physics, and Biology, too few Omani nationals responded to permit statistical

analysis. The mean responses given to specific curriculum content items by those non-Omani and those few Omani nationals sampled in these subject matter areas are reported in the appropriate tables below. Among teachers of the remaining subject matter areas, the statistical analysis of the responses given to curriculum content items as a function of nationality, reached significance in the analysis of the Arabic Language curriculum content and the analysis of the mathematics curriculum content. No statistically significant differences as a function of nationality were found in any responses given to Islamic Education curriculum content, English language curriculum content, or the Geography curriculum content. The significant differences obtained in the Arabic Language and Mathematics curriculum content questionnaires are reported in the paragraph below.

Among teachers of Arabic Language [$F(1,111) = 6.33$, $p = 0.013$], those of non-Omani nationality [mean response (+/- s.d.) = 3.56 (0.63)] reported statistically greater satisfaction with the Arabic Language curriculum content then those of Omani nationality [mean response (+/- s.d.) = 3.13 (0.72)]. Among teachers of Mathematics, those of Omani nationality reported statistically greater satisfaction with general mathematics items [$F(1,109) = 4.04$, $p = 0.047$, mean response (+/- s.d.) = 4.20 (0.42)] and learning and teaching items [$F(1,108) = 4.02$, $p = 0.047$, mean response (+/- s.d.)

= 4.08 (0.74)] than those of non-Omani nationality [mean responses (+/- s.d.) of 3.58 (0.76) and 3.34 (0.89) for each groups of items respectively]. Non-Omani nationals, however, reported slightly but significantly greater satisfaction with mathematics concepts in third grade [F(1,100) = 4.01, p = 0.048] than Omani nationals [mean responses (+/- s.d.) were 3.69 (0.52) and 3.24 (0.87) respectively]. Omani and non-Omani mathematics teachers did not differ in their response to any other curriculum content area (including construction, process, 1st and 3rd grade concepts, second grade Arts, and third grade Arts).

The mean responses given by Omani and non-Omani teachers to the specific curriculum content in their area are reported in Tables 89 through 100 below by subject matter area and topic of curriculum content addressed.

Table 89. Islamic Education teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.19 (18)	3.62 (68)	2.58	1,84	0.112

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 90: Arabic Language teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.13 (17)	3.56 (96)	6.33	1,111	0.013*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 91: English Language teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.31 (12)	3.10 (104)	3.31	1,114	0.072

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 92: Mathematics teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	4.20 (6)	3.58 (105)	4.04	1,109	0.047*
Construction	3.75 (6)	3.20 (105)	2.11	1,109	0.149
Procedures	4.00 (6)	3.45 (102)	2.12	1,106	0.148
Learning & Teaching	4.08 (6)	3.34 (104)	4.02	1,108	0.047*
1st G	3.38 (6)	3.45 (105)	<1	1,109	
2nd G	3.83 (6)	3.60 (99)	<1	1,103	
3rd G	3.24 (6)	3.69 (96)	4.01	1,100	0.048*
2nd G, Arts Program	2.98 (6)	3.34 (89)	1.21	1,93	0.274
3rd G, Arts Program	2.82 (6)	3.22 (97)	1.72	1,101	0.193

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 93: General Science teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.95 (2)	3.56 (28)			
Science & Scientists	2.90 (2)	3.83 (22)			
Evolution of Astronomy	4.08 (2)	4.00 (22)			
Transportation	4.17 (2)	3.89 (22)			
Health	4.60 (2)	4.04 (22)			
Science & world Food Problems	3.78 (2)	4.06 (22)			
Oil	3.88 (2)	4.16 (24)			
Solar Energy	3.79 (2)	3.93 (24)			
Nuclear Energy	3.75 (2)	3.70 (23)			
Enviroment & Pollution	3.69 (2)	3.97 (24)			
Meteorology & Forecasting	4.10 (2)	3.92 (24)			
2nd G, New Concepts	3.25 (2)	3.78 (18)			
3rd G, New Concepts	3.50 (2)	3.87 (23)			

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 94: History teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.71 (4)	3.70 (61)			
2nd G	4.19 (4)	4.13 (56)			
3rd G	4.01 (4)	3.75 (57)			

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 95: Geography teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.89 (9)	3.66 (64)	1.29	1,71	0.259
2nd G	4.11 (8)	3.85 (54)	1.04	1,60	0.312
3rd G	4.37 (7)	4.12 (54)	<1	1,59	
Contemporary Problems	4.32 (8)	3.95 (46)	1.89	1,52	0.176

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 96: Human Culture teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.54 (3)	3.70 (30)	<1	1,31	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 97: Civic Education teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.86 (4)	3.68 (36)			
1st G, Omani Society	4.49 (4)	4.40 (36)			
2nd G, Arabic Society	4.44 (3)	4.12 (30)			
3rd G, Muslim Nations	4.03 (4)	4.26 (30)			

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 98: Chemistry teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.76 (4)	3.46 (49)			
1st G, U1	3.17 (4)	2.55 (47)			
1st G, U2-4	3.79 (4)	3.47 (47)			
1st G, U7	3.75 (4)	3.21 (47)			
2nd G, U1	4.08 (4)	3.71 (45)			
2nd G, U2	3.79 (4)	3.39 (45)			
2nd G, U3-6	3.75 (4)	3.51 (45)			
3rd G, U1-2	4.07 (3)	3.78 (47)			
3rd G, U3	3.93 (3)	3.41 (47)			
3rd G, U5-6	4.40 (3)	3.57 (47)			
3rd G, U7	4.33 (3)	3.98 (47)			

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 99: Physics teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	4.00 (1)	3.61 (56)			
1st G, U1	2.50 (1)	3.54 (55)			
1st G, U2	3.67 (1)	3.78 (55)			
1st G, U3	3.67 (1)	3.41 (55)			
2nd G, U1	3.33 (1)	3.55 (52)			
2nd G, U2	3.33 (1)	3.41 (52)			
2nd G, U3	3.00 (1)	3.53 (52)			
3rd G, U1	2.67 (1)	3.78 (52)			
3rd G, U2	2.67 (1)	3.52 (52)			
3rd G, U3	3.75 (1)	3.42 (52)			

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 100: Biology teacher response to Curriculum Content items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, U1	4.21 (3)	3.72 (49)			
1st G, U2	3.67 (3)	3.65 (45)			
1st G, U3	3.93 (3)	3.82 (45)			
1st G, U4	3.83 (3)	3.83 (44)			
1st G, U5	3.67 (3)	3.82 (44)			
2nd G, U1	3.82 (3)	4.12 (40)			
2nd G, U2	3.92 (3)	4.01 (40)			
2nd G, U3	4.24 (3)	4.18 (40)			
3rd G, U1	4.54 (3)	4.19 (39)			
3rd G, U2	4.24 (3)	4.22 (39)			
3rd G, U3	4.50 (4)	3.98 (40)			
3rd G, U4	3.93 (4)	3.78 (42)			

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

C. District of Employment

1. Process of Curriculum Development

Table 101 presents the results obtained from the analyses of teacher and supervisor response to process of curriculum development items as a function of the subjects' district of employment. Too few supervisors within each general area of instruction were sampled from each district to complete a comparison by district of employment among these groups. The mean responses given by supervisors from

each district is reported (when possible) in Table 101 by each general area of instruction.

Statistically significant differences in the responses given to process of curriculum development items by district of employment were obtained in the analysis of teachers of the shared subject matters [$F(8,311) = 3.49$, $p < 0.001$], teachers of the arts [$F(8,202) = 7.45$, $p < 0.001$], and teachers of the sciences [$F(8,300) = 4.87$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison probe of each significant analysis found statistically significant group differences in every case.

Among teachers of the shared subject matters, those that worked in Dhahirah [mean response (+/- s.d.) = 3.51 (0.78)], reported greater satisfaction with the process of curriculum development in Oman than those that worked in Janoubiyah [mean response (+/- s.d.) = 2.84 (0.67)].

Among teachers of the arts, those that worked in Dhahirah [mean response (+/- s.d.) = 3.77 (0.68)] reported greater satisfaction with the process of curriculum development in Oman than those that worked in Wousta [mean response (+/- s.d.) = 2.59 (0.82)], Roustaq [mean response (+/- s.d.) = 2.74 (0.58)], Muscat [mean response (+/- s.d.) = 2.67 (0.66)], Musandam [mean response (+/- s.d.) = 2.61 (0.82)], Batinah [mean response (+/- s.d.) = 2.77 (0.82)], and Dakhiliyah [mean response (+/- s.d.) = 2.96 (0.79)].

Among teachers of the sciences, those that worked in Dhahirah [mean response (+/- s.d.) = 3.48 (0.58)] reported greater satisfaction with the process of curriculum development in Oman than those that worked in Muscat [mean response (+/- s.d.) = 2.63 (0.82)].

Table 101: Teacher and supervisor response to Curriculum Development items by district of employment.

	DISTRICT											
	Musc (n)	Bati (n)	Rous (n)	Dhak (n)	Shar (n)	Wous (n)	Dhah (n)	Jano (n)	Musa (n)	F	df	p
TEACHERS:												
Shared Subject Matters	2.88 (43)	3.10 (45)	2.91 (40)	3.12 (40)	2.89 (33)	2.77 (23)	3.51 (39)	2.84 (39)	3.09 (18)	3.49	8,311	<0.001*
Arts Subjects	2.67 (35)	2.77 (34)	2.74 (24)	2.96 (30)	3.37 (16)	2.59 (16)	3.77 (21)	3.39 (24)	2.61 (11)	7.45	8,202	<0.001**
Science Subjects	2.63 (47)	2.98 (48)	3.07 (39)	3.05 (41)	2.83 (28)	2.79 (26)	3.48 (36)	3.21 (36)	3.44 (8)	4.87	8,300	<0.001***
SUPERVISORS												
Shared Subject Matters	2.77 (6)	3.12 (5)	2.90 (3)	3.37 (5)	2.85 (4)	3.16 (3)	2.74 (3)	3.30 (4)	3.62 (2)			
Islamic Education	3.15 (1)	2.45 (1)	1.94 (1)	2.27 (1)	2.67 (2)	2.85 (2)	2.30 (1)	1.84 (2)	2.55 (1)			
Arts Subjects	3.28 (4)	3.12 (3)	3.68 (2)	2.50 (2)	2.61 (3)	2.39 (4)	3.00 (1)	2.48 (4)	---- (0)			
Science Subjects	2.55 (3)	3.68 (6)	2.83 (2)	2.67 (3)	3.79 (2)	2.42 (3)	3.43 (3)	3.08 (5)	3.21 (1)			

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = Dhah to differ significantly from Jano; ** = Dhah to differ significantly from Musc, Bati, Rous, Dhak, Wous, Musa; *** = Dhah to differ significantly from Musc.

2. Curriculum Content

No statistical analyses of the responses given to specific curriculum content items by district of employment were made in the cases of General Sciences or Civic

education, because too few teachers were sampled from each district. Their mean responses by district are reported, however, in the appropriate tables below. Differences in the responses given to specific curriculum content items by teachers of the remaining subject matter areas were statistically different only in the analyses of Islamic Education [$F(8,77) = 12.13$, $p < 0.001$], Arabic Language [$F(8,104) = 3.58$, $p = 0.001$], and Mathematics [General $F(8,103) = 2.85$, $p = 0.007$; Math Construction $F(8,103) = 2.74$, $p = 0.009$; Math Procedure $F(8,100) = 2.08$, $p < 0.044$; Learning and Teaching $F(8,102) = 2.52$, $p = 0.015$; 1st Grade $F(8,103) = 3.13$, $p = 0.003$; 2nd Grade $F(8,97) = 3.19$, $p = 0.003$; 3rd Grade $F(8,94) = 2.74$, $p = 0.009$].

Among Islamic Education teachers, those from Batinah [mean response (+/- s.d.) = 4.20 (0.36)], Sharqiyah [mean response (+/- s.d.) = 3.99 (0.50)], Musandam [mean response (+/- s.d.) = 3.99 (0.43)], Dakhiliyah [mean response (+/- s.d.) = 3.93 (0.49)], Dhahirah [mean response (+/- s.d.) = 3.92 (0.57)] and Muscat [mean response (+/- s.d.) = 3.85 (0.97)] reported statistically greater satisfaction with the Islamic Education curriculum content than those from Janoubiyah [mean response (+/- s.d.) = 1.95 (0.45)]. In addition, the responses given by Islamic Education teachers from Batinah and Muscat differed statistically (greater) than Islamic Education teachers from Roustaq [mean response (+/- s.d.) = 2.68 (1.10)]. Teachers from Batinah also

differed statistically from teachers from Wousta [mean response (+/- s.d.) = 2.66 (0.85)].

Among Arabic Language teachers, those from Dhahirah [mean response (+/- s.d.) = 4.14 (0.54)] differed statistically from those from Muscat [mean response (+/- s.d.) = 3.02 (0.63)]. The latter group reported statistically greater satisfaction with the Arabic Language curriculum than the former. Arabic language teachers from all other districts gave responses intermediate to, but not statistically different from, the responses given by Arabic Language teachers from Dhahirah and Muscat.

Among mathematics teachers, statistically significant differences as a function of district of employment were found in the type of responses given to general mathematics items, construction items, process items, learning and teaching items, 1st grade concept items, 2nd grade concept items, and 3rd grade concept items, however, the Scheffe post-hoc comparison of the group means only found specific differences in the analysis of first grade mathematics concepts. In this latter analysis, those mathematics teachers from Janoubiyah [mean response (+/- s.d.) = 3.83 (0.35)] reported statistically greater satisfaction with the 2nd grade concepts in mathematics than mathematics teachers from Muscat [mean response (+/- s.d.) = 2.78 (0.96)].

The mean responses given by teachers from each subject matter area to items on their specific curriculum content as

a function of district of employment are reported in Tables 102 through 113 below.

Table 102: Islamic Education teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.85 (15)	4.20 (15)	2.68 (10)	3.93 (10)	3.99 (7)	2.66 (6)	3.92 (10)	1.95 (9)	3.99 (4)	12.13	8,77	<0.001*,**,***

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = Musc to differ significantly from Rous; ** = Bati to differ significantly from Rous, Wous; *** = Musc, Dhah, Dhak, Shar, Bati, Musa to differ significantly from Jano.

Table 103: Arabic Language teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.02 (14)	3.31 (15)	3.61 (15)	3.61 (15)	3.37 (12)	3.29 (9)	4.14 (14)	3.53 (13)	3.45 (6)	3.58	8,104	0.001*

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = Dhah to differ significantly from Musc.

Table 104: English Language teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.12 (14)	3.05 (15)	3.09 (15)	3.14 (15)	3.28 (14)	3.16 (8)	3.13 (15)	2.98 (14)	3.24 (7)	<1	8,108	

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 105: Mathematics teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Concepts Taught In:												
General	3.05 (15)	3.61 (15)	3.53 (15)	3.52 (13)	3.86 (12)	3.42 (11)	3.72 (14)	4.05 (13)	4.43 (4)	2.85	8,103	0.007+
Construction	2.46 (15)	3.12 (15)	3.23 (15)	3.44 (13)	3.67 (12)	3.07 (11)	3.30 (14)	3.60 (13)	4.00 (4)	2.74	8,103	0.009+
Procedures	2.73 (15)	3.67 (15)	3.58 (12)	3.42 (13)	3.46 (12)	3.18 (11)	3.68 (14)	3.77 (13)	4.13 (4)	2.08	8,100	0.044+
Learning & Teaching	2.50 (15)	2.63 (15)	3.39 (14)	3.46 (13)	3.42 (12)	3.36 (11)	3.57 (14)	3.62 (13)	3.75 (4)	2.52	8,102	0.015+
1st G	2.78 (15)	3.63 (15)	3.57 (15)	3.47 (13)	3.48 (12)	3.21 (11)	3.46 (14)	3.83 (13)	3.65 (4)	3.13	8,103	0.003*
2nd G	3.30 (13)	3.87 (14)	3.48 (14)	3.68 (12)	3.63 (12)	3.05 (11)	3.68 (14)	3.88 (12)	4.26 (4)	3.19	8,97	0.003+
3rd G	3.58 (15)	4.10 (13)	3.49 (13)	3.75 (13)	3.56 (12)	3.46 (11)	3.33 (14)	3.90 (8)	4.05 (4)	2.74	8,94	0.009+
2nd G, Arts Program	3.54 (14)	3.68 (10)	3.42 (12)	3.11 (13)	3.43 (12)	3.07 (11)	3.26 (14)	3.15 (6)	2.85 (4)	<1	8,87	
3rd G, Arts Program	3.37 (14)	3.02 (12)	3.30 (13)	3.01 (13)	3.08 (12)	2.79 (11)	3.20 (14)	3.70 (11)	3.33 (4)	1.59	8,95	0.138

KEY: G = Grade; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups significantly different; * = Jano to differ significantly from Musc.

Table 106: General Science teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc X̄ (n)	Bati X̄ (n)	Rous X̄ (n)	Dhak X̄ (n)	Shar X̄ (n)	Wous X̄ (n)	Dhah X̄ (n)	Jano X̄ (n)	Musa X̄ (n)	F	df	p
Concepts Taught In:												
General	3.24 (3)	3.36 (3)	3.88 (5)	3.44 (5)	3.58 (1)	3.41 (3)	3.45 (5)	3.90 (4)	4.44 (1)			
Science & Scientists	3.00 (2)	3.93 (3)	4.40 (3)	3.64 (4)	3.40 (1)	3.73 (3)	3.00 (4)	4.33 (3)	5.00 (1)			
Evolution of Astronomy	3.50 (2)	4.54 (3)	4.83 (3)	3.46 (4)	4.38 (1)	4.08 (3)	3.51 (4)	4.26 (3)	3.88 (1)			
Transportation	3.17 (2)	4.33 (3)	4.56 (3)	3.50 (4)	4.00 (1)	4.22 (3)	3.25 (4)	4.44 (3)	4.00 (1)			
Health	4.00 (2)	4.33 (3)	4.67 (3)	3.48 (4)	4.20 (1)	4.27 (3)	3.60 (4)	4.73 (3)	3.60 (1)			
Science & World Food Problems	3.50 (2)	3.96 (3)	4.78 (3)	3.39 (4)	4.63 (1)	4.59 (3)	3.46 (4)	4.59 (3)	4.00 (1)			
Oil	3.38 (3)	4.50 (3)	3.88 (1)	4.15 (5)	4.75 (1)	4.42 (3)	4.03 (5)	4.41 (4)	3.63 (1)			
Solar Energy	3.00 (3)	3.44 (3)	3.67 (1)	3.90 (5)	5.00 (1)	4.28 (3)	3.95 (5)	4.54 (4)	3.67 (1)			
Nuclear Energy	2.58 (3)	3.25 (3)	4.00 (1)	3.90 (5)	2.75 (1)	4.08 (3)	3.58 (5)	4.69 (4)	---- (0)			
Environment & Pollution	3.25 (3)	4.11 (3)	4.00 (1)	3.75 (5)	4.83 (1)	4.50 (3)	3.60 (5)	4.41 (4)	3.91 (1)			
Meteorology & Forecasting	3.11 (3)	3.56 (3)	4.50 (1)	3.70 (5)	5.00 (1)	4.39 (3)	3.94 (5)	4.38 (4)	3.83 (1)			
2nd G, New Concepts	4.25 (2)	3.94 (3)	3.50 (1)	3.54 (4)	---- (0)	3.72 (3)	3.00 (4)	4.17 (2)	5.00 (1)			
3rd G, New Concepts	3.89 (3)	3.44 (3)	3.67 (1)	3.67 (5)	---- (0)	3.67 (3)	3.60 (5)	4.50 (4)	5.00 (1)			

KEY: G = Grade; U = Unit; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Table 107: History teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc X̄ (n)	Bati X̄ (n)	Rous X̄ (n)	Dhak X̄ (n)	Shar X̄ (n)	Wous X̄ (n)	Dhah X̄ (n)	Jano X̄ (n)	Musa X̄ (n)	F	df	p
Concepts Taught In:												
General	3.62 (12)	3.73 (12)	3.77 (8)	3.40 (9)	4.14 (5)	3.50 (4)	3.96 (6)	3.58 (7)	3.97 (2)	<1	8,56	
2nd G	4.11 (12)	4.34 (8)	4.10 (8)	4.04 (9)	4.56 (5)	3.86 (4)	4.17 (6)	3.80 (6)	4.28 (2)	<1	8,51	
3rd G	3.78 (12)	3.85 (8)	3.66 (8)	3.67 (9)	4.05 (5)	3.73 (4)	3.70 (6)	3.64 (7)	4.19 (2)	<1	8,52	

KEY: G = Grade; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 108: Geography teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa	F	df	p
	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)			
Concepts Taught In:												
General	3.58 (12)	3.45 (12)	3.75 (8)	3.58 (12)	4.12 (4)	3.66 (5)	3.95 (7)	3.89 (8)	3.70 (5)	<1	8,64	
2nd G	4.07 (11)	3.51 (8)	3.90 (8)	3.70 (12)	4.50 (4)	3.50 (3)	3.85 (6)	4.07 (7)	4.03 (3)	1.09	8,53	0.386
3rd G	4.21 (8)	4.05 (8)	4.15 (8)	4.31 (12)	4.39 (4)	3.73 (4)	4.17 (7)	4.16 (7)	3.81 (3)	<1	8,52	
Contemporary Problems	3.96 (10)	4.17 (4)	4.18 (8)	3.96 (10)	4.31 (4)	3.83 (3)	3.77 (4)	3.72 (8)	4.48 (3)	<1	8,45	

KEY: G = Grade; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 109: Human Culture teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa	F	df	p
	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)			
Concepts Taught In Human Culture	3.49 (4)	3.60 (5)	3.56 (5)	3.73 (5)	3.97 (3)	2.47 (2)	4.51 (4)	3.51 (4)	4.32 (1)	1.71	8,24	0.147

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 110: Civic Education teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Concepts Taught In:												
General	3.27 (7)	4.11 (5)	4.01 (3)	3.43 (4)	3.89 (4)	2.97 (5)	4.50 (4)	3.94 (5)	3.52 (3)			
1st G, Omani Society	4.32 (7)	4.41 (5)	4.73 (3)	4.41 (4)	4.77 (4)	4.22 (5)	4.71 (4)	4.43 (5)	3.76 (3)			
2nd G, Arabic Society	4.04 (6)	3.63 (3)	4.53 (3)	4.13 (4)	4.61 (4)	3.46 (3)	4.60 (4)	4.11 (4)	4.05 (2)			
3rd G, Muslim Nations	3.92 (6)	3.91 (4)	4.75 (3)	4.13 (3)	4.61 (4)	3.66 (4)	4.80 (4)	4.17 (4)	4.63 (2)			

KEY: G = Grade; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Table 111: Chemistry teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
Concepts Taught In:												
General	3.36 (10)	3.43 (10)	3.59 (5)	3.19 (6)	3.84 (6)	3.58 (5)	3.21 (4)	3.70 (6)	3.51 (1)	1.38	8,44	0.233
1st G, U1	2.90 (10)	2.65 (10)	2.00 (5)	2.40 (5)	2.50 (6)	2.67 (5)	2.25 (4)	3.07 (5)	2.33 (1)	<1	8,42	
1st G, U2-4	3.50 (10)	3.30 (10)	3.93 (5)	3.53 (5)	3.44 (6)	4.03 (5)	2.88 (4)	3.51 (5)	3.00 (1)	<1	8,42	
1st G, U7	3.30 (10)	2.90 (10)	3.10 (5)	3.00 (5)	3.33 (6)	3.50 (5)	3.13 (4)	3.70 (5)	5.00 (1)	1.96	8,42	0.076
2nd G, U1	3.46 (8)	3.70 (10)	3.33 (5)	3.07 (5)	3.94 (6)	4.53 (5)	3.67 (4)	4.13 (5)	5.00 (1)	1.42	8,40	0.220
2nd G, U2	3.97 (8)	3.13 (10)	3.40 (5)	3.60 (5)	2.74 (6)	4.55 (5)	2.69 (4)	3.15 (5)	4.00 (1)	1.32	8,40	0.263
2nd G, U3-6	3.66 (8)	3.37 (10)	3.47 (5)	3.53 (5)	3.83 (6)	3.87 (5)	3.21 (4)	3.43 (5)	2.50 (1)	<1	8,40	
3rd G, U1-2	3.78 (9)	3.64 (10)	3.96 (5)	3.90 (6)	4.05 (5)	4.20 (5)	2.95 (4)	3.84 (5)	3.80 (1)	1.60	8,41	0.156
3rd G, U3	3.38 (8)	3.39 (10)	3.48 (5)	3.57 (6)	3.60 (5)	3.69 (5)	2.96 (4)	3.43 (5)	3.40 (1)	<1	8,41	
3rd G, U5-6	3.73 (9)	3.40 (10)	3.80 (5)	3.73 (6)	3.72 (5)	3.96 (5)	3.45 (4)	3.44 (5)	2.60 (1)	<1	8,41	
3rd G, U7	3.91 (9)	3.97 (10)	4.20 (5)	3.89 (6)	3.80 (5)	4.30 (5)	3.71 (4)	4.23 (5)	4.50 (1)	<1	8,41	

KEY: G = Grade; U = Unit; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 112: Physics teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa	F	df	p
	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)			
Concepts Taught In:												
General	3.50 (10)	3.41 (10)	3.60 (7)	3.71 (8)	3.17 (4)	3.31 (4)	3.92 (6)	4.09 (7)	3.92 (1)	1.40	8,48	0.222
1st G, U1	3.25 (10)	3.85 (10)	3.88 (7)	3.50 (8)	3.31 (4)	3.13 (4)	2.92 (5)	3.86 (7)	3.50 (1)	1.62	8,47	0.143
1st G, U2	3.50 (10)	3.83 (10)	3.71 (7)	3.50 (8)	3.92 (4)	4.33 (4)	3.73 (5)	4.10 (7)	4.00 (1)	<1	8,47	
1st G, U3	3.47 (10)	3.53 (10)	3.48 (7)	3.04 (8)	2.92 (4)	3.75 (4)	3.33 (5)	3.71 (7)	3.33 (1)	<1	8,47	
2nd G, U1	3.37 (9)	3.73 (10)	3.71 (7)	3.50 (8)	3.00 (3)	4.25 (4)	2.90 (5)	3.67 (6)	3.67 (1)	1.60	8,44	0.153
2nd G, U2	3.11 (9)	3.50 (10)	3.67 (7)	3.21 (8)	3.00 (3)	4.00 (4)	2.97 (5)	3.89 (6)	3.33 (1)	1.22	8,44	0.308
2nd G, U3	3.22 (9)	3.83 (10)	3.62 (7)	3.38 (8)	3.00 (3)	3.92 (4)	3.07 (5)	3.78 (6)	4.33 (1)	1.38	8,44	0.233
3rd G, U1	3.57 (9)	3.98 (10)	4.00 (6)	3.53 (8)	3.50 (3)	3.31 (4)	3.63 (6)	4.29 (6)	4.00 (1)	1.26	8,44	0.288
3rd G, U2	3.33 (9)	3.63 (10)	3.44 (6)	3.17 (8)	3.00 (3)	3.96 (4)	3.50 (6)	4.06 (6)	3.33 (1)	1.13	8,44	0.366
3rd G, U3	3.19 (9)	3.29 (10)	3.65 (6)	3.19 (8)	2.83 (3)	3.94 (4)	3.42 (6)	4.08 (6)	3.25 (1)	1.52	8,44	0.179

KEY: G = Grade; U = Unit; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 113: Biology teacher response to Curriculum Content items by district of employment.

	DISTRICT											
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa	F	df	p
	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)			
Concepts Taught In:												
1st G, U1	3.64 (9)	3.98 (10)	3.91 (5)	3.61 (8)	4.13 (4)	4.06 (2)	3.70 (7)	3.22 (6)	3.98 (1)	1.07	8,43	0.403
1st G, U2	3.60 (8)	3.69 (10)	3.93 (5)	3.55 (7)	4.21 (4)	3.67 (2)	3.17 (5)	3.56 (6)	3.67 (1)	<1	8,39	
1st G, U3	3.93 (8)	4.11 (10)	4.00 (5)	3.78 (7)	4.53 (4)	3.83 (2)	3.00 (5)	3.33 (6)	4.00 (1)	1.40	8,39	0.229
1st G, U4	4.00 (8)	4.14 (10)	3.68 (5)	3.63 (7)	4.12 (3)	3.90 (2)	3.08 (5)	3.87 (6)	4.30 (1)	1.17	8,38	0.344
1st G, U5	3.72 (8)	4.10 (10)	4.09 (5)	4.03 (7)	4.40 (3)	3.77 (2)	2.87 (5)	3.42 (6)	3.82 (1)	1.88	8,38	0.092
2nd G, U1	4.07 (7)	4.33 (10)	4.17 (5)	4.02 (8)	4.43 (3)	3.65 (2)	3.49 (5)	4.65 (2)	4.00 (1)	1.16	8,34	0.351
2nd G, U2	4.11 (7)	4.33 (10)	4.30 (5)	3.91 (8)	4.58 (3)	3.75 (2)	3.20 (5)	3.50 (2)	3.25 (1)	1.81	8,34	0.110
2nd G, U3	4.29 (7)	4.33 (10)	4.30 (5)	4.14 (8)	4.69 (3)	4.13 (2)	3.35 (5)	4.48 (2)	3.88 (1)	1.65	8,34	0.148
3rd G, U1	3.85 (8)	4.43 (9)	4.22 (5)	4.26 (8)	4.75 (3)	4.55 (2)	3.91 (4)	4.01 (2)	4.18 (1)	1.12	8,33	0.374
3rd G, U2	3.96 (8)	4.29 (9)	4.32 (5)	4.13 (8)	4.76 (3)	4.07 (2)	3.79 (4)	5.00 (2)	4.86 (1)	1.51	8,33	0.190
3rd G, U3	3.80 (8)	4.26 (9)	3.99 (5)	3.96 (9)	4.47 (4)	4.50 (3)	3.60 (4)	3.48 (2)	4.20 (1)	1.22	8,36	0.315
3rd G, U4	3.73 (8)	3.93 (10)	3.84 (5)	3.82 (9)	4.30 (4)	3.81 (3)	3.22 (5)	2.96 (2)	4.08 (1)	1.43	8,38	0.217

KEY: G = Grade; U = Unit; Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhilyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

D. Educational Preparation

1. Process of Curriculum Development

Table 114 presents the results obtained from the analyses of teacher and supervisor (of the shared subject matters in Arabic and English Languages only) response to process of curriculum development items as a function of educational preparation. Fewer than 5 supervisors within the general areas of instruction in Islamic Education, arts, and sciences were found at 2 or more levels of educational preparation, and consequently a comparison of supervisors of these three areas by educational preparation was not possible. However, the mean responses given by supervisors from these latter areas at each level of educational preparation is reported (when possible) in Table 114.

No statistically significant differences in response to process of curriculum development in Oman were found, by one-way ANOVA, among teachers of any general subject matter area.

Among supervisors of the shared subject matters in Arabic and English Languages, a statistically significant difference as a function of educational preparation was found by one-way ANOVA [$F(2,32) = 3.37$, $p = 0.047$], however, the post-hoc Scheffe probe of this analysis revealed no statistically significant group differences.

Table 114: Teacher and supervisor response to Curriculum Development items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	2.96 (120)	3.10 (114)	3.01 (86)	1.08	2,317	0.341
Arts Subjects	2.86 (123)	3.10 (69)	3.17 (19)	2.72	2,208	0.068
Science Subjects	3.05 (229)	2.88 (60)	3.04 (20)	1.16	2,306	0.314
SUPERVISORS:						
Shared Subject Matters	2.68 (5)	2.50 (5)	3.26 (25)	3.37	2,32	0.047+
Islamic Education	---- (0)	---- (0)	2.45 (12)			
Arts Subjects	---- (0)	---- (0)	2.83 (24)			
Science Subjects	---- (0)	4.19 (1)	3.07 (27)			

KEY: COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different.

2. Curriculum Content

Differences in responses given to specific curriculum content items as a function of educational preparation were found in the analyses of Islamic Education [$F(2,83) = 9.80$, $p < 0.001$], mathematics [third grade concepts $F(2,100) = 9.63$, $p < 0.001$], biology [1st grade unit 3 $F(2,45) = 3.34$, $p = 0.044$; 2nd grade unit 2 $F(2,40) = 5.03$, $p = 0.011$; and

2nd grade unit 3 $F(2,40) = 3.20$, $p = 0.051$] and chemistry [3rd grade units 1 and 2 $F(2,47) = 3.36$, $p = 0.043$]. Education did not differentiate the type of response given to Arabic Language curriculum content items, English language curriculum content items, human culture curriculum content items, general science curriculum content items, geography curriculum content items, civic education curriculum content items, or history curriculum content items.

Among Islamic Education teachers, those that had obtained a college degree, either in education [mean response (+/- s.d.) = 3.88 (0.73)] or not [mean response (+/- s.d.) = 3.62 (0.94)], reported statistically greater satisfaction with the Islamic Education curriculum content than those teachers that had not obtained a college degree [mean response (+/- s.d.) = 2.65 (1.15)].

Among mathematics teachers, those who had obtained a college degree [In Education mean response (+/- s.d.) = 3.71 (0.51) and Not In Education mean response (+/- s.d.) = 3.70 (0.37)] reported statistically greater satisfaction with third grade mathematics concepts than those that did <u>not</u> obtain a college degree [mean response (+/- s.d.) = 2.81 (0.86)]. Educational preparation did <u>not</u> differentiate the responses given to any other aspect of the mathematics curriculum.

The significant differences by educational preparation found in the analysis of the biology teachers' or chemistry teachers' responses to curriculum content items did not yield specific group differences in any case. However, the overall trend in each case found non-college degree teachers reporting the least level of satisfaction with the curriculum content.

The mean responses given to the curriculum content in each subject matter area as a function of educational preparation are reported in the Tables 115 through 126 below.

Table 115: Islamic Education teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.88 (29)	3.62 (41)	2.65 (16)	9.80	2,83	<0.001*

KEY: COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = coll/univ deg in ed & coll/univ deg not in ed to differ significantly from other^.

Table 116: Arabic Language teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.46 (48)	3.52 (52)	3.54 (13)	<1	2,110	

KEY: COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 117: English Language teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.14 (43)	3.06 (18)	3.14 (56)	<1	2,114	

KEY: **COLL** = college; **UNIV** = university; **DEG** = degree; **ED** = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 118: Mathematics teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.66 (92)	3.62 (13)	3.07 (7)	1.97	2,109	0.144
Construction	3.27 (92)	3.19 (13)	3.08 (7)	<1	2,109	
Procedure	3.51 (90)	3.50 (13)	2.58 (6)	2.92	2,106	0.058
Learning & Teaching	3.38 (92)	3.42 (13)	3.17 (6)	<1	2,108	
1st G	3.48 (92)	3.27 (13)	3.19 (7)	<1	2,109	
2nd G	3.65 (88)	3.39 (11)	3.43 (7)	1.15	2,103	0.320
3rd G	3.71 (83)	3.70 (13)	2.81 (7)	9.63	2,100	<0.001*
2nd G, Arts Program	3.38 (77)	3.18 (13)	2.85 (6)	1.54	2,93	0.220
3nd G, Arts Program	3.22 (85)	3.16 (13)	2.88 (6)	<1	2,101	

KEY: **G** = Grade; **COLL** = college; **UNIV** = university; **DEG** = degree; **ED** = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = coll/univ deg in ed & coll/univ deg not in ed to differ significantly from other^.

Table 119: General Science teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.64 (24)	3.34 (6)	---- (0)	<1	1,28	
Science & Scientists	3.86 (19)	3.36 (5)	---- (0)	2.15	1,22	0.156
Evolution of Astronomy	4.03 (19)	3.92 (5)	---- (0)	<1	1,22	
Transportation	3.96 (19)	3.73 (5)	---- (0)	<1	1,22	
Health	4.15 (19)	3.84 (5)	---- (0)	<1	1,22	
Science & World Food Problems	4.06 (19)	3.93 (5)	---- (0)	<1	1,22	
Oil	4.18 (21)	3.98 (5)	---- (0)	<1	1,24	
Solar Energy	3.93 (21)	3.88 (5)	---- (0)	<1	1,24	
Nuclear Energy	3.82 (20)	3.25 (5)	---- (0)	1.46	1,23	0.239
Environment & Pollution	4.01 (21)	3.68 (5)	---- (0)	<1	1,24	
Meteorology & Forecasting	3.87 (21)	4.17 (5)	---- (0)	<1	1,24	
2nd G, New Concepts	3.83 (16)	3.29 (4)	---- (0)	2.18	1,18	0.157
3rd G, New Concepts	3.83 (21)	3.92 (4)	---- (0)	<1	1,23	

KEY: G = Grade; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 120: History teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.62 (38)	3.79 (22)	3.86 (5)	<1	2,62	
2nd G	4.10 (35)	4.06 (20)	4.63 (5)	1.70	2,57	0.192
3rd G	3.80 (37)	3.67 (19)	3.89 (5)	<1	2,58	

KEY: G = Grade; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 121: Geography teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.67 (47)	3.75 (24)	3.51 (2)	<1	2,70	
2nd G	3.89 (38)	3.91 (21)	3.58 (3)	<1	2,59	
3rd G	4.09 (37)	4.23 (23)	4.44 (1)	<1	2,58	
Contemporary Problems	3.87 (32)	4.18 (20)	4.39 (2)	1.58	2,51	0.216

KEY: G = Grade; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 122: Human Culture teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.73 (19)	3.51 (10)	3.89 (4)	<1	2,30	

KEY: COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 123: Civic Education teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.64 (19)	3.52 (13)	4.12 (8)	1.59	2,37	0.218
1st G, Omani Society	4.39 (19)	4.35 (13)	4.57 (8)	<1	2,37	
2nd G, Arabic Society	4.13 (15)	4.11 (11)	4.26 (7)	<1	2,30	
3rd G, Muslim Nations	4.38 (13)	3.99 (13)	4.40 (8)	1.38	2,31	0.266

KEY: G = Grade; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 124: Chemistry teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.51 (25)	3.46 (25)	3.44 (3)	<1	2,50	
1st G, U1	2.46 (23)	2.69 (25)	2.89 (3)	<1	2,48	
1st G, U2-4	3.43 (23)	3.56 (25)	3.44 (3)	<1	2,48	
1st G, U7	3.22 (23)	3.28 (25)	3.33 (3)	<1	2,48	
2nd G, U1	3.50 (22)	3.94 (24)	3.89 (3)	1.32	2,46	0.278
2nd G, U2	3.53 (22)	3.51 (24)	1.89 (3)	2.59	2,46	0.086
2nd G, U3-6	3.61 (22)	3.45 (24)	3.56 (3)	<1	2,46	
3rd G, U1-2	3.93 (23)	3.76 (24)	3.00 (3)	3.36	2,47	0.043+
3rd G, U3	3.39 (23)	3.56 (24)	2.80 (3)	2.45	2,47	0.097
3rd G, U5-6	3.70 (23)	3.56 (24)	3.47 (3)	<1	2,47	
3rd G, U7	4.04 (23)	4.04 (24)	3.50 (3)	<1	2,47	

KEY: G = Grade; U = Unit; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups or no two groups with five (5) or more subjects to be significantly different.

Table 125: Physics teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
General	3.59 (51)	4.05 (1)	3.71 (5)	<1	2,54	
1st G, U1	3.53 (50)	4.00 (1)	3.35 (5)	<1	2,53	
1st G, U2	3.77 (50)	4.00 (1)	3.80 (5)	<1	2,53	
1st G, U3	3.37 (50)	4.67 (1)	3.60 (5)	1.48	2,53	0.237
2nd G, U1	3.51 (47)	4.67 (1)	3.60 (5)	1.32	2,50	0.276
2nd G, U2	3.39 (47)	3.67 (1)	3.53 (5)	<1	2,50	
2nd G, U3	3.49 (47)	4.33 (1)	3.67 (5)	<1	2,50	
3rd G, U1	3.78 (47)	3.75 (1)	3.58 (5)	<1	2,50	
3rd G, U2	3.53 (47)	3.67 (1)	3.27 (5)	<1	2,50	
3rd G, U3	3.42 (47)	3.75 (1)	3.45 (5)	<1	2,50	

KEY: G = Grade; U = Unit; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 126: Biology teacher response to Curriculum Content items by type of educational preparation.

	EDUCATIONAL PREPARATION					
	COLL/UNIV DEG IN ED	COLL/UNIV DEG NOT IN ED	OTHER^			
	$\bar{X}$ (n)	$\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
Concepts Taught In:						
1st G, U1	3.75 (35)	3.71 (14)	3.87 (3)	<1	2,49	
1st G, U2	3.70 (31)	3.61 (14)	3.28 (3)	<1	2,45	
1st G, U3	4.03 (31)	3.58 (14)	2.93 (3)	3.34	2,45	0.044+
1st G, U4	3.87 (30)	3.84 (14)	3.50 (3)	<1	2,44	
1st G, U5	3.90 (30)	3.71 (14)	3.33 (3)	<1	2,44	
2nd G, U1	4.17 (28)	4.15 (12)	3.25 (3)	2.97	2,40	0.063
2nd G, U2	4.19 (28)	3.85 (12)	2.92 (3)	5.03	2,40	0.011+
2nd G, U3	4.26 (28)	4.21 (12)	3.32 (3)	3.20	2,40	0.051+
3rd G, U1	4.23 (29)	4.19 (11)	4.21 (2)	<1	2,39	
3rd G, U2	4.26 (29)	4.17 (11)	4.00 (2)	<1	2,39	
3rd G, U3	4.02 (30)	3.97 (11)	4.25 (4)	<1	2,42	
3rd G, U4	3.83 (32)	3.66 (11)	3.63 (4)	<1	2,44	

KEY: G = Grade; U = Unit; COLL = college; UNIV = university; DEG = degree; ED = education

^ Refers to non-college or university degree

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups or no two groups with five (5) or more subjects to be significantly different.

E. Amount of In-service Training

1. Process of Curriculum Development

Table 127 presents the results obtained from the analyses of teacher and supervisor (of the sciences only) responses to the process of curriculum development items as a function of the subject's in-service training time. Fewer than 5 supervisors of the shared subject matters in Arabic and English Languages, Islamic Education, and arts were found at 2 or more levels of in-service training time, and consequently a comparison of supervisors of these areas by in-service training time was not possible. However, the mean responses given by supervisors from these latter areas at each level of in-service training time are reported (when possible) in Table 127.

No statistically significant differences in the responses given to process of curriculum development items as a function of in-service training times were found, by one-way ANOVA, among teachers of any general area of instruction or by supervisors of the sciences.

2. Curriculum Content

In-service training time statistically differentiated the responses given to Islamic Education curriculum content items [$F(3,82) = 16.80$, $p < 0.001$], civic education items [Omani society $F(3,36) = 4.65$, $p = 0.008$], general sciences items [Science and Scientists $F(3,20) = 3.06$, $p = 0.052$]

Table 127: Teacher and supervisor response to Curriculum Development items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
TEACHERS:							
Shared Subject Matters	3.08 (43)	3.09 (170)	3.04 (25)	2.83 (82)	2.41	3,316	0.067
Arts Subjects	2.69 (27)	2.97 (151)	2.96 (9)	3.30 (24)	2.61	3,207	0.053
Science Subjects	3.08 (51)	2.99 (204)	3.11 (18)	3.04 (36)	<1	3,305	
SUPERVISORS:							
Shared Subject Matters	---- (0)	3.46 (3)	2.85 (3)	3.05 (29)			
Islamic Education	2.97 (1)	---- (0)	---- (0)	2.40 (11)			
Arts Subjects	3.38 (2)	---- (0)	---- (0	2.78 (21)			
Science Subjects	2.88 (5)	4.19 (1)	---- (0)	3.12 (22)	1.69	2,25	0.205

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

and Chemistry items [1st grade unit 1 $F(3,47) = 3.90$, $p = 0.014$; 3rd grade units 1 and 2 $F(3,46) = 3.20$, $p = 0.032$]. Training did not effect the responses given to specific curriculum content items by Arabic language teachers, English language teachers, human culture teachers, mathematics teachers, physics teachers, biology teachers, geography teachers, or history teachers.

Among Islamic Education teachers, those who had no in-service training [mean response (+/- s.d.) = 4.02 (0.60] or less than 3 months of in-service training [mean response (+/- s.d.) = 3.90 (0.72)] reported statistically greater satisfaction with the Islamic Education curriculum content than those that had had 1 to 2 years of in-service training [mean response (+/- s.d.) = 2.56 (0.95)].

Among civic education teachers, those who had no in-service training [mean response (+/- s.d.) = 3.55 (1.01)] reported statistically less satisfaction with the civic education curriculum content on the Omani society than those who had any in-service training. For comparison, the mean response (+/- s.d.) of civic education teachers with greater than 1 month but less than 3 months of training was 4.52 (0.50) and with 1 to 2 years training was 4.62 (0.28).

No specific group differences were found in the posthoc probes of the significant differences found in the general sciences analyses or the chemistry analyses.

The mean responses given to the specific curriculum content items by teachers of each subject matter area are reported below in Tables 128 through 139.

Table 128: Islamic Education teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	4.02 (17)	3.90 (42)	3.28 (3)	2.56 (24)	16.80	3,82	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = <0 month, >0-3 months to differ significantly from 1-2 years.

Table 129: Arabic Language teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.35 (15)	3.55 (79)	3.44 (6)	3.34 (13)	<1	3,109	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 130: English Language teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.05 (11)	3.16 (46)	3.28 (16)	3.05 (44)	1.66	3,113	0.180

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 131: Mathematics teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.74 (12)	3.64 (78)	3.74 (6)	3.37 (16)	<1	3,108	
Construction	3.28 (12)	3.27 (78)	3.04 (6)	3.21 (16)	<1	3,108	
Procedures	3.45 (11)	3.53 (77)	2.75 (6)	3.40 (15)	1.33	3,105	0.268
Learning & Teaching	3.38 (12)	3.38 (78)	3.42 (6)	3.30 (15)	<1	3,107	
1st G	3.43 (12)	3.45 (78)	3.09 (6)	3.48 (16)	<1	3,108	
2nd G	3.54 (12)	3.64 (73)	3.32 (6)	3.60 (15)	<1	3,102	
3rd G	3.41 (11)	3.67 (70)	3.51 (6)	3.80 (16)	1.22	3,99	0.308
2nd G, Arts Program	3.39 (10)	3.39 (66)	2.98 (6)	3.11 (14)	<1	3,92	
3rd G, Arts Program	3.32 (11)	3.16 (73)	2.90 (6)	3.36 (14)	<1	3,100	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 132: General Science teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.67 (7)	3.55 (20)	3.36 (1)	3.67 (2)	<1	3,26	
Science & Scientists	4.00 (6)	3.76 (16)	2.00 (1)	4.00 (1)	3.06	3,20	0.052+
Evolution of Astronomy	4.14 (6)	3.96 (16)	3.40 (1)	4.75 (1)	<1	3,20	
Transportation	4.22 (6)	3.79 (16)	3.33 (1)	4.67 (1)	<1	3,20	
Health	4.23 (6)	3.97 (16)	4.20 (1)	5.00 (1)	1.04	3,20	0.398
Science & World Food Problems	4.30 (6)	3.97 (16)	2.56 (1)	5.00 (1)	1.88	3,20	0.165
Oil	4.34 (4)	4.25 (19)	3.00 (1)	3.25 (2)			
Solar Energy	4.13 (4)	3.96 (19)	2.75 (1)	3.67 (2)			
Nuclear Energy	4.38 (4)	3.68 (18)	2.50 (1)	3.25 (2)			
Environment & Pollution	3.85 (4)	4.09 (19)	2.45 (1)	3.56 (2)			
Meteorology & Forecasting	3.83 (4)	4.04 (19)	3.20 (1)	3.50 (2)			
2nd G, New Concepts	3.58 (4)	3.84 (15)	2.50 (1)	---- (0)			
3rd G, New Concepts	3.83 (4)	3.93 (18)	2.67 (1)	3.67 (2)			

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 133: History teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.76 (5)	3.67 (46)	3.73 (4)	3.79 (10)	<1	3,61	
2nd G	4.18 (5)	4.14 (42)	4.25 (4)	4.01 (9)	<1	3,56	
3rd G	3.94 (5)	3.70 (43)	3.98 (4)	3.87 (9)	<1	3,57	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 134: Geography teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.51 (10)	3.71 (53)	3.50 (3)	3.90 (7)	<1	3,69	
2nd G	4.03 (8)	3.87 (45)	3.78 (3)	3.83 (6)	<1	3,58	
3rd G	3.85 (6)	4.19 (47)	3.73 (3)	4.43 (5)	1.18	3,57	0.325
Contemporary Problems	4.10 (6)	3.96 (40)	3.78 (3)	4.36 (5)	<1	3,50	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 135: Human Culture teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.69 (7)	3.66 (24)	3.59 (1)	4.41 (1)	<1	3,29	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 136: Civic Education teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	2.90 (5)	3.75 (28)	3.89 (1)	4.09 (6)	2.59	3,36	0.068
1st G, Omani Society	3.55 (5)	4.52 (28)	4.63 (1)	4.62 (6)	4.65	3,36	0.008*
2nd G, Arabic Society	3.36 (4)	4.26 (23)	4.32 (1)	4.25 (5)	2.80	3,29	0.058
3rd G, Muslim Nations	3.84 (4)	4.29 (24)	4.50 (1)	4.23 (5)	<1	3,30	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 1-2 years to differ significantly from <0 month & >0-3 months.

Table 137: Chemistry teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.34 (8)	3.50 (35)	3.44 (3)	3.58 (7)	<1	3,49	
1st G, U1	2.17 (8)	2.49 (34)	3.39 (3)	3.39 (6)	3.90	3,47	0.014+
1st G, U2-4	3.40 (8)	3.57 (34)	2.78 (3)	3.58 (6)	<1	3,47	
1st G, U7	3.19 (8)	3.25 (34)	2.67 (3)	3.67 (6)	1.59	3,47	0.204
2nd G, U1	3.38 (8)	3.88 (32)	3.89 (3)	3.44 (6)	<1	3,45	
2nd G, U2	3.03 (8)	3.63 (32)	2.31 (3)	3.38 (6)	1.41	3,45	0.251
2nd G, U3-6	3.22 (8)	3.56 (32)	3.52 (3)	3.76 (6)	<1	3,45	
3rd G, U1-2	3.34 (7)	3.94 (34)	3.20 (3)	3.77 (6)	3.20	3,46	0.032+
3rd G, U3	3.23 (7)	3.53 (34)	3.16 (3)	3.29 (6)	<1	3,46	
3rd G, U5-6	3.06 (7)	3.75 (34)	3.53 (3)	3.60 (6)	1.49	3,46	0.229
3rd G, U7	3.45 (7)	4.12 (34)	3.67 (3)	4.14 (6)	2.63	3,46	0.061

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different.

Table 138: Physics teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.43 (10)	3.67 (38)	3.25 (1)	3.62 (8)	<1	3,53	
1st G, U1	3.22 (9)	3.62 (38)	2.50 (1)	3.51 (8)	1.45	3,52	0.239
1st G, U2	3.70 (9)	3.84 (38)	3.33 (1)	3.63 (8)	<1	3,52	
1st G, U3	2.93 (9)	3.45 (38)	3.33 (1)	3.83 (8)	2.02	3,52	0.123
2nd G, U1	3.19 (9)	3.57 (35)	3.33 (1)	3.85 (8)	1.35	3,49	0.270
2nd G, U2	3.04 (9)	3.49 (35)	3.33 (1)	3.50 (8)	<1	3,49	
2nd G, U3	3.26 (9)	3.57 (35)	3.33 (1)	3.63 (8)	<1	3,49	
3rd G, U1	3.78 (10)	3.76 (34)	3.50 (1)	3.78 (8)	<1	3,49	
3rd G, U2	3.45 (10)	3.53 (34)	3.67 (1)	3.46 (8)	<1	3,49	
3rd G, U3	3.31 (10)	3.49 (34)	3.50 (1)	3.31 (8)	<1	3,49	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 139: Biology teacher response to Curriculum Content items by amount of in-service training

	AMOUNT						
	<0 month $\bar{X}$ (n)	>0-3 months $\bar{X}$ (n)	4-12 months $\bar{X}$ (n)	1-2 years $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
1st G, U1	3.85 (12)	3.72 (32)	3.74 (5)	3.57 (3)	<1	3,48	
1st G, U2	4.02 (11)	3.54 (31)	3.54 (4)	3.60 (2)	1.40	3,44	0.257
1st G, U3	3.99 (11)	3.71 (31)	4.11 (4)	4.22 (2)	<1	3,44	
1st G, U4	3.85 (11)	3.78 (30)	4.08 (4)	4.05 (2)	<1	3,43	
1st G, U5	3.74 (11)	3.78 (30)	4.03 (4)	4.18 (2)	<1	3,43	
2nd G, U1	4.31 (9)	3.99 (26)	4.22 (5)	4.14 (3)	<1	3,39	
2nd G, U2	4.28 (9)	3.88 (26)	4.15 (5)	4.00 (3)	<1	3,39	
2nd G, U3	4.25 (9)	4.10 (26)	4.54 (5)	4.10 (3)	<1	3,39	
3rd G, U1	4.31 (9)	4.15 (25)	4.53 (5)	3.98 (3)	<1	3,38	
3rd G, U2	4.26 (9)	4.21 (25)	4.46 (5)	3.81 (3)	<1	3,38	
3rd G, U3	4.15 (9)	3.96 (26)	4.18 (7)	3.86 (3)	<1	3,41	
3rd G, U4	3.83 (10)	3.73 (27)	3.91 (7)	3.71 (3)	<1	3,43	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

F. Location of In-service Training

1. Process of Curriculum Content

Table 140 presents the results obtained from the analysis of teacher and supervisor (of the shared subject matters in Arabic and English Languages and the sciences) response to process of curriculum development items as a

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function of the location where the subject's received their in-service training. Fewer than 5 supervisors within the general area of instruction in Islamic Education and the arts, received their in-service training outside of Oman, and consequently, a comparison of supervisors of these subject matter areas by in-service training location was not possible. However, the mean responses given by supervisors from these latter subject matter areas trained inside and outside of Oman are reported (when possible) in Table 140.

No statistically significant differences by teachers, from any general area of instruction, as shown in the responses given to process of curriculum development items receiving in-service training either inside or outside of Oman were found, by one-way ANOVA.

Among supervisors of the sciences, no statistically significant differences in the responses given to process of curriculum development items were found. However, among supervisors of the shared subject matters in Arabic and English Languages, a statistically significant differences was obtained [$F(1,33) = 11.67$, $p = 0.002$], finding those trained inside Oman [mean response (+/- s.d.) = 3.43 (0.63)] to report statistically greater satisfaction with the process of curriculum development in Oman than those trained outside of Oman [mean response (+/- s.d.) = 2.68 (0.68)].

Table 140: Teacher and supervisor response to Curriculum Development items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
TEACHERS:					
Shared Subject Matters	3.11 (96)	2.98 (224)	2.08	1,318	0.150
Arts Subjects	3.14 (40)	2.93 (171)	2.21	1,209	0.139
Science Subjects	3.05 (68)	3.00 (241)	<1	1,307	
SUPERVISORS:					
Shared Subject Matters	3.43 (18)	2.68 (17)	11.67	1,33	0.002*
Islamic Education	2.28 (8)	2.79 (4)			
Arts Subjects	2.74 (19)	3.28 (4)			
Science Subjects	3.30 (17)	2.83 (11)	3.54	1,26	0.071

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

2. Curriculum Content

Location of in-service training differentiated the responses given to specific curriculum content items by Islamic Education teachers [F(1,84) = 7.64, p = 0.007], General Science teachers [Science and World Food Problems F(1,22) = 4.86, p = 0.038], and Civic education teachers [Muslim Nations F(1,32) = 4.48, p = 0.042].

Among Islamic Education teachers, those trained outside of Oman [mean response (+/- s.d.) = 3.73 (0.89)] reported statistically greater satisfaction with the Islamic

Education curriculum content then those trained inside of Oman [mean response (+/- s.d.) = 3.11 (1.13)] .

Among General Science teachers, those trained outside of Oman [mean response (+/- s.d.) = 4.26 (0.68)] reported statistically greater satisfaction with the general science curriculum content on science and the world food problem than those trained inside of Oman [mean response (+/- s.d.) = 3.49 (1.00)]. Training did not differentiate the responses given to any other curriculum content area in the General Sciences including general items, second grade unit 1 items, evolution and astronomy items, transportation items, science and human health problems items, oil items, solar energy items, nuclear energy items, environment and pollution items, meteorology and climate forces items, and items on new concepts in 2nd and 3rd grade.

Among Civic education teachers, those trained outside of Oman [mean response (+/- s.d.) = 4.39 (0.57)] reported significantly greater satisfaction than those trained inside of Oman [mean response (+/- s.d.) = 3.86 (0.84)].

The mean responses given to curriculum content items by teachers from each subject matter area as a function of location of in-service training are reported below in Tables 141 through 152.

Table 141: Islamic Education teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.11 (28)	3.73 (58)	7.64	1,84	0.007*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 142: Arabic Language teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.46 (37)	3.51 (76)	<1	1,111	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 143: English Language teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.20 (30)	3.10 (87)	1.61	1,115	0.206

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 144: Mathematics teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.69 (24)	3.60 (88)	<1	1,110	
Construction	3.20 (24)	3.26 (88)	<1	1,110	
Procedures	3.70 (23)	3.40 (86)	1.92	1,107	0.169
Learning & Teaching	3.58 (24)	3.32 (87)	1.70	1,109	0.196
1st G	3.40 (24)	3.45 (88)	<1	1,110	
2nd G	3.49 (23)	3.64 (83)	1.00	1,104	0.319
3rd G	3.56 (23)	3.67 (80)	<1	1,101	
2nd G, Arts Program	3.59 (20)	3.25 (76)	2.89	1,94	0.093
3rd G, Arts Program	3.14 (21)	3.20 (83)	<1	1,102	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 145: General Science teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.33 (9)	3.69 (21)	1.94	1,28	0.175
Science & Scientists	3.34 (7)	3.93 (17)	3.94	1,22	0.060
Evolution of Astronomy	3.84 (7)	4.08 (17)	<1	1,22	
Transportation	3.57 (7)	4.06 (17)	1.85	1,22	0.187
Health	3.86 (7)	4.18 (17)	1.38	1,22	0.253
Science & World Food Problems	3.49 (7)	4.26 (17)	4.86	1,22	0.038*
Oil	4.22 (9)	4.10 (17)	<1	1,24	
Solar Energy	3.69 (9)	4.04 (17)	1.05	1,24	0.315
Nuclear Energy	3.60 (9)	3.77 (16)	<1	1,23	
Environment & Pollution	3.81 (9)	4.03 (17)	<1	1,24	
Meteorology & Forecasting	3.95 (9)	3.92 (17)	<1	1,24	
2nd G, New Concepts	3.57 (7)	3.81 (13)	<1	1,18	
3rd G, New Concepts	3.78 (9)	3.88 (16)	<1	1,23	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 146: History teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.48 (10)	3.74 (55)	1.38	1,63	0.244
2nd G	3.75 (9)	4.20 (51)	3.93	1,58	0.052
3rd G	3.40 (10)	3.84 (51)	3.68	1,59	0.060

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 147: Geography teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.77 (11)	3.67 (62)	<1	1,71	
2nd G	4.08 (8)	3.85 (54)	<1	1,60	
3rd G	4.40 (9)	4.11 (52)	1.49	1,59	0.227
Contemporary Problems	4.24 (8)	3.96 (46)	1.11	1,52	0.298

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 148: Human Culture teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.50 (8)	3.75 (25)	<1	1,31	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 149: Civic Education teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.57 (11)	3.74 (29)	<1	1,38	
1st G, Omani Society	4.37 (11)	4.43 (29)	<1	1,38	
2nd G, Arabic Society	4.10 (10)	4.18 (23)	<1	1,31	
3rd G, Muslim Nations	3.86 (10)	4.39 (24)	4.48	1,32	0.042*

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 150: Chemistry teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.36 (9)	3.50 (44)	<1	1,51	
1st G, U1	2.41 (9)	2.64 (42)	<1	1,49	
1st G, U2-4	3.38 (9)	3.52 (42)	<1	1,49	
1st G, U7	3.00 (9)	3.31 (42)	1.58	1,49	0.214
2nd G, U1	3.44 (10)	3.81 (24)	1.08	1,47	0.303
2nd G, U2	2.94 (9)	3.53 (40)	1.71	1,47	0.197
2nd G, U3-6	3.30 (9)	3.58 (40)	1.40	1,47	0.243
3rd G, U1-2	3.58 (9)	3.84 (41)	1.34	1,48	0.253
3rd G, U3	3.47 (9)	3.43 (41)	<1	1,48	
3rd G, U5-6	3.76 (9)	3.59 (41)	<1	1,48	
3rd G, U7	3.91 (9)	4.02 (41)	<1	1,48	

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 151: Physics teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.87 (11)	3.55 (46)	1.42	1,55	0.125
1st G, U1	3.58 (11)	3.50 (45)	<1	1,54	
1st G, U2	3.85 (11)	3.76 (45)	<1	1,54	
1st G, U3	3.48 (11)	3.40 (45)	<1	1,54	
2nd G, U1	3.40 (10)	3.58 (43)	<1	1,51	
2nd G, U2	3.45 (10)	3.40 (43)	<1	1,51	
2nd G, U3	3.50 (10)	3.53 (43)	<1	1,51	
3rd G, U1	3.97 (9)	3.72 (44)	1.05	1,51	0.310
3rd G, U2	3.72 (9)	3.46 (44)	<1	1,51	
3rd G, U3	3.67 (9)	3.38 (44)	1.15	1,51	0.289

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 152: Biology teacher response to Curriculum Content items by location of in-service training

	LOCATION				
	In Oman $\bar{X}$ (n)	Outside Oman $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G. U1	3.97 (14)	3.66 (38)	2.40	1,50	0.128
1st G, U2	3.68 (13)	3.64 (35)	<1	1,46	
1st G, U3	3.95 (13)	3.78 (35)	<1	1,46	
1st G, U4	3.92 (13)	3.80 (34)	<1	1,45	
1st G, U5	4.14 (13)	3.68 (34)	3.35	1,45	0.074
2nd G, U1	4.24 (13)	4.04 (30)	<1	1,41	
2nd G, U2	4.23 (13)	3.91 (30)	1.70	1,41	0.200
2nd G, U3	4.27 (13)	4.14 (30)	<1	1,41	
3rd G, U1	4.36 (11)	4.17 (31)	<1	1,40	
3rd G, U2	4.35 (11)	4.18 (31)	<1	1,40	
3rd G, U3	4.12 (12)	3.99 (33)	<1	1,43	
3rd G, U4	3.79 (13)	3.77 (34)	<1	1,45	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

G. Workshop Attendance

1. Process of Curriculum Development

Table 153 presents the results obtained from the analysis of teacher and supervisor (of the shared subject matters in Arabic and English Languages only) response to process of curriculum development items as a function of the subject's workshop attendance. Fewer than 5 supervisors within the general area of instruction on Islamic Education, the arts, and the sciences were found at 2 or more levels of workshop attendance and consequently a comparison of supervisors of these subject matter areas by workshop attendance was not possible. However, the mean responses given by supervisors from these latter areas at each level of workshop attendance is reported (when possible) in Table 153.

No statistically significant differences in responses given to process of curriculum development items were found as a function of workshop attendance among teachers of any general area of instruction. Among supervisors of the shared subject matters in Arabic and English Languages, however, a statistically significant one-way ANOVA was obtained [$F(2,32) = 6.73$, $p = 0.004$]. The subsequent Scheffe probe of this analysis found those supervisors attending no workshops [mean response (+/- s.d.) = 3.46 (0.67)] to report statistically greater satisfaction with the process of curriculum development than those that had

attended more than 3 workshops [mean response (+/- s.d.) = 2.74 (0.62)].

Table 153: Teacher and supervisor response to Curriculum Development items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
TEACHERS:								
Shared Subject Matters	3.07 (79)	3.25 (56)	2.98 (44)	2.82 (39)	2.95 (102)	2.38	4,315	0.052
Arts Subjects	3.01 (54)	2.89 (53)	2.96 (38)	3.11 (36)	2.91 (30)	<1	4,206	
Science Subjects	2.94 (48)	3.05 (54)	3.06 (90)	3.13 (51)	2.88 (66)	1.04	4,304	0.386
SUPERVISORS:								
Shared Subject Matters	3.46 (17)	---- (0)	2.00 (1)	---- (0)	2.74 (17)	6.73	2,32	0.004*
Islamic Education	2.45 (11)	---- (0)	---- (0)	---- (0)	2.45 (1)			
Arts Subjects	2.83 (24)	---- (0)	---- (0)	---- (0)	---- (0)			
Science Subjects	3.07 (27)	---- (0)	4.19 (1)	---- (0)	---- (0)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 0 workshops to differ significantly from >3 workshops.

2. Curriculum Content

Workshop attendance differentiated the responses given to specific curriculum content items by teachers of Islamic Education only [F(4.81) = 2.89, p = 0.027] and teachers of mathematics [General F(4,107) = 2.82, p = 0.029; Procedures F(4.104) = 2.46, p = 0.050; and Learning and Teaching F(4.106) = 2.47, p = 0.049]. Among the Islamic education

group, those teachers attending one workshop [mean response (+/- s.d.) = 3.81 (0.69) reported statistically greater satisfaction with the Islamic Education curriculum than those attending three workshops [mean response (+/- s.d.) = 2.45 (1.22)].

Among the mathematics teachers group, specific group differences were isolated in the analysis of the General items only. In this case, teachers attending more than 3 workshop [mean response (+/- s.d.) = 3.79 (0.67)] reported significantly greater satisfaction toward the General mathematics curriculum issues than those that attended no workshop [mean response (+/- s.d.) 2.99 (1.00)].

The mean response given to curriculum content items by teachers of each of the twelve subject matter areas are reported in Tables 154 though 165 below by workshop attendance.

Table 154: Islamic Education teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.59 (41)	3.81 (24)	3.57 (7)	2.45 (7)	3.24 (7)	2.89	4,81	0.027*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
The Scheffe pairwise comparison of the group means showed: * = 1 workshop to differ significantly from 3 workshops.

Table 155: Arabic Language teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.42 (16)	3.46 (25)	3.58 (29)	3.55 (23)	3.41 (20)	<1	4,108	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 156: English Language teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.16 (21)	2.88 (5)	3.23 (8)	3.11 (9)	3.12 (74)	<1	4,112	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 157: Mathematics teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	2.99 (12)	3.70 (20)	3.56 (29)	3.73 (23)	3.79 (28)	2.82	4,107	0.029*
Construction	2.80 (12)	3.27 (20)	3.20 (29)	3.48 (23)	3.28 (28)	1.12	4,107	0.352
Procedures	2.71 (12)	3.45 (20)	3.54 (27)	3.54 (23)	3.65 (27)	2.46	4,104	0.050+
Learning & Teaching	2.83 (12)	3.18 (20)	3.33 (29)	3.52 (23)	3.69 (27)	2.47	4,106	0.049+
1st G	3.04 (12)	3.32 (20)	3.51 (29)	3.53 (23)	3.53 (28)	1.52	4,107	0.202
2nd G	3.58 (11)	3.59 (20)	3.64 (25)	3.63 (23)	3.58 (27)	<1	4,101	
3rd G	3.40 (12)	3.61 (20)	3.76 (25)	3.79 (20)	3.58 (26)	1.22	4,98	0.306
2nd G, Arts Program	2.97 (12)	3.47 (19)	3.28 (23)	3.38 (17)	3.37 (25)	<1	4,91	
3rd G, Arts Program	2.99 (12)	3.22 (19)	3.38 (25)	3.07 (22)	3.19 (26)	<1	4,99	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups significantly different; * = >3 workshops to differ significantly from 0 workshops.

Table 158: General Science teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	3.38 (2)	3.87 (7)	3.88 (10)	3.02 (4)	3.24 (7)	2.37	4,25	0.080
Science & Scientists	4.00 (2)	3.65 (7)	3.78 (8)	4.13 (3)	3.50 (4)	<1	4,19	
Evolution of Astronomy	4.44 (2)	4.02 (7)	4.22 (8)	3.74 (3)	3.57 (4)	<1	4,19	
Transportation	4.50 (2)	3.81 (7)	4.13 (8)	4.00 (3)	3.33 (4)	<1	4,19	
Health	4.00 (2)	4.26 (7)	4.28 (8)	3.77 (3)	3.70 (4)	<1	4,19	
Science & World Food Problems	4.83 (2)	4.10 (7)	4.48 (8)	3.70 (3)	2.89 (4)	5.05	4,19	0.006+
Oil	4.50 (2)	4.02 (7)	4.59 (8)	3.75 (4)	3.75 (5)	3.07	4,21	0.039+
Solar Energy	3.92 (2)	3.76 (7)	4.54 (8)	3.58 (4)	3.42 (5)	2.25	4,21	0.099
Nuclear Energy	3.25 (2)	3.71 (7)	4.08 (8)	3.56 (4)	3.31 (4)	<1	4,20	
Environment & Pollution	4.13 (2)	3.95 (7)	4.40 (8)	3.35 (4)	3.64 (5)	1.87	4,21	0.154
Meteorology & Forecasting	3.25 (2)	4.10 (7)	4.40 (8)	3.42 (4)	3.64 (5)	1.81	4,21	0.164
2nd G, New Concepts	3.75 (2)	3.81 (6)	3.73 (5)	3.78 (3)	3.54 (4)	<1	4,15	
3rd G, New Concepts	3.33 (2)	4.14 (7)	3.71 (7)	3.67 (4)	3.93 (5)	<1	4,20	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups or no two groups with five (5) or more subjects to be significantly different.

Table 159: History teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	3.67 (14)	3.58 (23)	3.81 (13)	3.72 (9)	3.93 (6)	<1	4,60	
2nd G	4.05 (14)	4.03 (19)	4.35 (12)	4.07 (9)	4.28 (6)	<1	4,55	
3rd G	3.76 (13)	3.72 (20)	3.87 (13)	3.76 (9)	3.73 (6)	<1	4,56	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 160: Geography teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	3.52 (16)	3.65 (15)	3.72 (13)	3.82 (14)	3.76 (15)	<1	4,68	
2nd G	3.77 (15)	3.73 (11)	3.91 (12)	4.13 (10)	3.91 (14)	<1	4,57	
3rd G	3.92 (13)	4.32 (10)	4.05 (11)	4.35 (12)	4.15 (15)	<1	4,56	
Contemporary Problems	3.93 (13)	3.82 (8)	3.93 (10)	4.36 (10)	3.97 (13)	<1	4,49	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 161: Human Culture teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.75 (11)	3.55 (8)	3.14 (6)	4.44 (5)	3.64 (3)	2.47	4,28	0.067

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 162: Civic Education teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	3.65 (13)	3.75 (7)	3.29 (6)	3.86 (8)	3.93 (6)	<1	4,35	
1st G, Omani Society	4.45 (13)	4.58 (7)	4.16 (6)	4.18 (8)	4.70 (6)	<1	4,35	
2nd G, Arabic Society	4.06 (12)	4.32 (4)	4.00 (6)	4.17 (6)	4.40 (5)	<1	4,28	
3rd G, Muslim Nations	4.22 (11)	4.43 (6)	3.94 (5)	4.12 (8)	4.58 (4)	<1	4,29	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 163: Chemistry teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	3.38 (13)	3.50 (9)	3.44 (15)	3.43 (5)	3.66 (11)	<1	4,48	
1st G, U1	2.58 (13)	3.07 (9)	2.43 (14)	2.07 (5)	2.70 (10)	1.35	4,46	0.265
1st G, U2-4	3.35 (13)	3.41 (9)	3.49 (14)	3.50 (5)	3.77 (10)	<1	4,46	
1st G, U7	3.27 (13)	3.56 (9)	3.25 (14)	3.00 (5)	3.10 (10)	<1	4,46	
2nd G, U1	3.77 (13)	3.96 (9)	3.72 (13)	3.20 (5)	3.81 (9)	<1	4,44	
2nd G, U2	2.94 (13)	3.72 (9)	3.52 (13)	3.95 (5)	3.38 (9)	<1	4,44	
2nd G, U3-6	3.79 (13)	3.23 (9)	3.59 (13)	2.97 (5)	3.65 (9)	2.30	4,44	0.074
3rd G, U1-2	3.77 (11)	3.60 (9)	3.92 (15)	3.76 (5)	3.82 (10)	<1	4,45	
3rd G, U3	3.50 (11)	3.26 (9)	3.44 (15)	3.44 (5)	3.52 (10)	<1	4,45	
3rd G, U5-6	3.69 (11)	3.47 (9)	3.55 (15)	3.56 (5)	3.82 (10)	<1	4,45	
3rd G, U7	3.89 (11)	3.91 (9)	3.99 (15)	4.40 (5)	4.03 (10)	<1	4,45	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 164: Physics teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
General	3.61 (13)	3.47 (9)	3.64 (19)	3.93 (8)	3.39 (8)	<1	4,52	
1st G, U1	3.56 (12)	3.39 (9)	3.61 (19)	3.32 (8)	3.59 (8)	1.35	4,51	0.265
1st G, U2	3.72 (12)	4.07 (9)	3.61 (19)	4.00 (8)	3.71 (8)	<1	4,51	
1st G, U3	3.36 (12)	3.63 (9)	3.51 (19)	3.42 (8)	3.04 (8)	<1	4,51	
2nd G, U1	3.42 (11)	4.08 (8)	3.43 (18)	3.48 (8)	3.50 (8)	1.43	4,48	0.240
2nd G, U2	3.48 (11)	3.83 (8)	3.21 (18)	3.46 (8)	3.29 (8)	<1	4,48	
2nd G, U3	3.64 (11)	3.88 (8)	3.39 (18)	3.46 (8)	3.38 (8)	<1	4,48	
3rd G, U1	3.84 (11)	3.81 (9)	3.67 (18)	3.80 (8)	3.79 (7)	<1	4,48	
3rd G, U2	3.59 (11)	3.91 (9)	3.35 (18)	3.54 (8)	3.21 (7)	1.20	4,48	0.325
3rd G, U3	3.46 (11)	3.68 (9)	3.31 (18)	3.59 (8)	3.17 (70)	<1	4,48	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 165: Biology teacher response to Curriculum Content items by number of workshops attended.

	NUMBER							
	0 $\bar{X}$ (n)	1 $\bar{X}$ (n)	2 $\bar{X}$ (n)	3 $\bar{X}$ (n)	>3 $\bar{X}$ (n)	F	df	p
Concepts Taught In:								
1st G, U1	3.78 (8)	3.92 (9)	3.91 (14)	3.68 (10)	3.43 (11)	1.09	4,47	0.374
1st G, U2	3.65 (8)	3.97 (6)	3.68 (14)	3.52 (9)	3.55 (11)	<1	4,43	
1st G, U3	3.65 (8)	3.94 (6)	3.94 (14)	3.85 (9)	3.74 (11)	<1	4,43	
1st G, U4	3.81 (8)	3.77 (6)	3.87 (14)	3.84 (9)	3.83 (10)	<1	4,42	
1st G, U5	3.49 (8)	3.68 (6)	3.99 (14)	3.61 (9)	4.05 (10)	<1	4,42	
2nd G, U1	4.03 (6)	4.25 (6)	3.99 (13)	4.08 (9)	4.22 (9)	<1	4,38	
2nd G, U2	4.00 (6)	4.25 (6)	3.87 (13)	4.14 (9)	3.92 (9)	<1	4,38	
2nd G, U3	4.11 (6)	4.27 (6)	4.05 (13)	4.16 (9)	4.39 (9)	<1	4,38	
3rd G, U1	4.20 (5)	4.50 (6)	4.13 (12)	4.10 (10)	4.27 (9)	<1	4,37	
3rd G, U2	4.20 (5)	4.17 (6)	4.12 (12)	4.25 (10)	4.38 (9)	<1	4,37	
3rd G, U3	4.16 (5)	4.45 (6)	3.90 (12)	3.84 (11)	4.06 (11)	1.09	4,40	0.376
3rd G, U4	3.72 (6)	3.70 (7)	3.85 (12)	3.83 (11)	3.71 (11)	<1	4,42	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

H. Teaching Experience

1. Process of Curriculum Content

Table 166 presents the results obtained from the analysis of teacher and supervisor (all but Islamic Education supervisors) response to process of curriculum development items as a function of their teaching experience. All but 3 supervisors of Islamic Education had

1 to 3 years of teaching experience; consequently, no statistical analysis of the effect of teaching experience on the response given by Islamic Education supervisors to process of curriculum development items was performed. However, the mean responses by Islamic Education supervisors as a function of teaching experience are shown in Table 151.

Statistically significant differences in the responses given to process of curriculum development items as a function of teaching experience were found, by one-way ANOVA only, among supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 7.40$, $p = 0.002$]. The Scheffe pairwise comparison probe of the mean responses indicated that supervisors with 1 to 3 years of teaching experience [mean response (+/- s.d.) = 3.58 (0.56)] reported statistically greater satisfaction with the process of curriculum development than supervisors that had more than 10 years [mean response (+/- s.d.) = 2.87 (0.69)] of teaching experience.

Teacher response to process of curriculum development items was unaffected by teaching experience.

2. Curriculum Content

The comparison of the responses given by human culture teachers or history teachers as a function of the number of years of teacher experiences they had was not performed because teachers of each of these two subject matter areas did not differ in regard to the amount of teaching

experience they had. The statistical analysis of the

Table 166: Teacher and supervisor response to Curriculum Development items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
TEACHERS:							
Shared Subject Matters	3.20 (42)	2.96 (47)	3.02 (46)	3.00 (185)	<1	3,316	
Arts Subjects	2.69 (13)	3.19 (23)	2.79 (22)	2.99 (153)	1.55	3,207	0.203
Science Subjects	3.17 (27)	3.31 (27)	3.00 (75)	2.95 (180)	2.22	3,305	0.086
SUPERVISORS:							
Shared Subject Matters	3.58 (12)	2.06 (2)	---- (0)	2.87 (21)	7.40	2,32	0.002*
Islamic Education	2.46 (9)	2.12 (2)	2.97 (1)	---- (0)			
Arts Subjects	2.78 (14)	2.91 (9)	---- (0)	---- (0)	<1	1,21	
Science Subjects	2.95 (18)	3.40 (10)	---- (0)	---- (0)	3.06	1,26	0.092

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 1-3 years to differ significantly from >10 years.

responses given by teachers from the remaining subject matter areas, revealed statistically significant differences, as a function of teaching experience, among mathematics teachers [Third Grade Concepts $F(3,99) = 5.44$, $p = 0.002$] and geography teachers [Contemporary Issues of Science $F(3,50) = 4.75$, $p = 0.005$] only. Teaching experience did not differentiate the responses given by Islamic Education teachers, Arabic language teachers, English language teachers, general sciences teachers,

physics teachers, biology teachers, civic education teachers, or chemistry teachers.

Among mathematics teachers, those that had more than four years of teaching experience [mean response (+/- s.d.) = 3.83 (0.48), 3.65 (0.48), and 3.75 (0.47) for teachers with 4-6 yrs, 7-10 yrs, and > 10 yrs of teaching experience respectively] reported statistically greater levels of satisfaction with the 3rd grade mathematics concepts than those that had 1 to 3 years of teaching experience [mean responses (+/- s.d.) = 3.08 (0.89)]. Teaching experience among mathematics teachers did not differentiate the type of responses given to any other aspect of the mathematics curriculum.

Among geography teachers, those that had 4 to 6 years of teaching experience [mean response (+/- s.d.) = 4.79 (0.61)] reported statistically greater satisfaction with the contemporary issues in science aspect of the geography curriculum content than those that had greater than 6 years of teaching experience [mean response (+/- s.d.) = 3.82 (0.61) and 3.88 (0.70) for teachers with 7 to 10 yrs and > 10 yrs of teaching experience respectively]. Teaching experience did not differentiate the responses given to any other aspect of the geography curriculum content.

The mean responses given to each curriculum content subject matter area by its teachers are reported in Tables 167 though 178 below as a function of teaching experience.

physics teachers, biology teachers, civic education teachers, or chemistry teachers.

Among mathematics teachers, those that had more than four years of teaching experience [mean response (+/- s.d.) = 3.83 (0.48), 3.65 (0.48), and 3.75 (0.47) for teachers with 4-6 yrs, 7-10 yrs, and > 10 yrs of teaching experience respectively] reported statistically greater levels of satisfaction with the 3rd grade mathematics concepts than those that had 1 to 3 years of teaching experience [mean responses (+/- s.d.) = 3.08 (0.89)]. Teaching experience among mathematics teachers did not differentiate the type of responses given to any other aspect of the mathematics curriculum.

Among geography teachers, those that had 4 to 6 years of teaching experience [mean response (+/- s.d.) = 4.79 (0.61)] reported statistically greater satisfaction with the contemporary issues in science aspect of the geography curriculum content than those that had greater than 6 years of teaching experience [mean response (+/- s.d.) = 3.82 (0.61) and 3.88 (0.70) for teachers with 7 to 10 yrs and > 10 yrs of teaching experience respectively]. Teaching experience did not differentiate the responses given to any other aspect of the geography curriculum content.

The mean responses given to each curriculum content subject matter area by its teachers are reported in Tables 167 though 178 below as a function of teaching experience.

Table 167: Islamic Education teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.47 (16)	3.26 (18)	3.50 (8)	3.67 (44)	<1	3,82	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 168: Arabic Language teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.60 (12)	3.62 (12)	3.38 (20)	3.49 (69)	<1	3,109	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 169: English Language teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.10 (13)	3.12 (16)	3.08 (17)	3.14 (71)	<1	3,113	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 170: Mathematics teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.73 (12)	3.74 (9)	3.63 (32)	3.57 (59)	<1	3,108	
Construction	3.35 (12)	3.31 (9)	3.20 (32)	3.24 (59)	<1	3,108	
Procedures	3.42 (12)	3.94 (9)	3.40 (30)	3.42 (58)	<1	3,105	
Learning & Teaching	3.71 (12)	3.78 (9)	3.19 (32)	3.34 (58)	1.69	3,107	0.173
1st G	3.39 (12)	3.58 (9)	3.44 (32)	3.42 (59)	<1	3,108	
2nd G	3.53 (12)	3.68 (9)	3.63 (28)	3.60 (57)	<1	3,102	
3rd G	3.08 (12)	3.83 (9)	3.65 (28)	3.75 (54)	5.44	3,99	0.002*
2nd G, Arts Program	3.09 (11)	3.68 (6)	3.34 (28)	3.29 (51)	<1	3,92	
3rd G, Arts Program	2.77 (11)	3.38 (8)	3.18 (30)	3.25 (55)	1.58	3,100	0.200

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 4-6 years, 7-10 years & >10 years to differ significantly from 1-3 years.

Table 171: General Science teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	2.84 (2)	3.45 (4)	3.76 (6)	3.64 (18)	1.05	3,26	0.389
Science & Scientists	4.30 (2)	3.70 (4)	3.67 (5)	3.72 (13)	<1	3,20	
Evolution of Astronomy	3.60 (2)	4.06 (4)	3.88 (5)	4.11 (13)	<1	3,20	
Transportation	4.00 (2)	3.67 (4)	3.67 (5)	4.08 (13)	<1	3,20	
Health	3.90 (2)	4.30 (4)	4.28 (5)	3.98 (13)	<1	3,20	
Science & World Food Problems	4.00 (2)	3.53 (4)	4.00 (5)	4.21 (13)	<1	3,20	
Oil	4.31 (2)	3.75 (3)	4.23 (6)	4.16 (15)	<1	3,22	
Solar Energy	3.83 (2)	3.03 (3)	3.75 (6)	4.18 (15)	2.00	3,22	0.143
Nuclear Energy	4.25 (2)	2.75 (3)	3.67 (6)	3.85 (14)	1.40	3,21	0.271
Environment & Pollution	3.41 (2)	3.54 (3)	4.06 (6)	4.06 (15)	<1	3,22	
Meteorology & Forecasting	3.67 (2)	3.57 (3)	4.00 (6)	4.01 (15)	<1	3,22	
2nd G, New Concepts	3.67 (2)	3.17 (3)	4.00 (5)	3.77 (10)	<1	3,16	
3rd G, New Concepts	4.00 (2)	4.00 (3)	4.00 (6)	3.71 (14)	<1	3,21	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 172: History teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.99 (3)	3.95 (2)	3.57 (3)	3.68 (57)			
2nd G	4.31 (3)	4.50 (2)	4.16 (3)	4.10 (52)			
3rd G	3.99 (3)	4.37 (1)	3.94 (3)	3.73 (54)			

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 173: Geography teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.18 (3)	3.91 (11)	3.48 (13)	3.73 (46)	2.02	3,69	0.119
2nd G	3.36 (3)	4.21 (9)	3.59 (11)	3.93 (39)	2.04	3,58	0.118
3rd G	3.88 (3)	4.53 (5)	3.77 (12)	4.24 (41)	2.54	3,57	0.065
Contemporary Problems	3.78 (1)	4.79 (8)	3.82 (10)	3.88 (35)	4.75	3,50	0.005*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 4-6 years to differ significantly from 7-10 years & >10 years.

Table 174: Human Culture teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	4.29 (3)	3.90 (4)	3.18 (2)	3.62 (24)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 175: Civic Education teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.46 (4)	3.88 (6)	3.37 (4)	3.74 (26)	<1	3,36	
1st G, Omani Society	4.25 (4)	4.53 (6)	4.67 (4)	4.37 (26)	<1	3,36	
2nd G, Arabic Society	4.04 (4)	4.15 (6)	3.89 (3)	4.21 (20)	<1	3,29	
3rd G, Muslim Nations	4.14 (4)	4.15 (5)	4.63 (2)	4.23 (20)	<1	3,30	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 176: Chemistry teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.56 (4)	3.60 (5)	3.31 (14)	3.53 (30)	<1	3,49	
1st G, U1	2.58 (4)	2.73 (5)	2.21 (13)	2.75 (29)	1.26	3,47	0.301
1st G, U2-4	3.13 (4)	3.83 (5)	3.47 (13)	3.50 (29)	<1	3,47	
1st G, U7	3.63 (4)	3.30 (5)	3.31 (13)	3.17 (29)	<1	3,47	
2nd G, U1	3.58 (4)	3.87 (5)	3.79 (13)	3.72 (27)	<1	3,45	
2nd G, U2	3.81 (4)	3.73 (5)	3.37 (13)	3.33 (27)	<1	3,45	
2nd G, U3-6	3.13 (4)	3.43 (5)	3.63 (13)	3.55 (27)	<1	3,45	
3rd G, U1-2	3.73 (3)	3.80 (5)	3.73 (14)	3.83 (28)	<1	3,46	
3rd G, U3	2.87 (3)	3.61 (5)	3.26 (14)	3.56 (28)	1.98	3,46	0.130
3rd G, U5-6	3.27 (3)	3.76 (5)	3.60 (14)	3.64 (28)	<1	3,46	
3rd G, U7	3.72 (3)	4.37 (5)	3.71 (14)	4.11 (28)	2.00	3,46	0.128

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 177: Physics teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.59 (2)	3.53 (4)	3.72 (15)	3.58 (36)	<1	3,53	
1st G, U1	3.63 (2)	3.50 (3)	3.43 (15)	3.55 (36)	<1	3,52	
1st G, U2	3.33 (2)	3.89 (3)	3.64 (15)	3.85 (36)	<1	3,52	
1st G, U3	3.67 (2)	3.44 (3)	3.24 (15)	3.47 (36)	<1	3,52	
2nd G, U1	3.67 (2)	3.50 (2)	3.36 (15)	3.62 (34)	<1	3,49	
2nd G, U2	3.67 (2)	3.50 (2)	3.31 (15)	3.44 (34)	<1	3,49	
2nd G, U3	3.33 (2)	3.83 (2)	3.31 (15)	3.61 (34)	<1	3,49	
3rd G, U1	3.75 (2)	4.17 (3)	3.73 (14)	3.74 (34)	<1	3,49	
3rd G, U2	3.00 (2)	4.06 (3)	3.50 (14)	3.49 (34)	<1	3,49	
3rd G, U3	3.25 (2)	3.19 (3)	3.59 (14)	3.39 (34)	<1	3,49	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 178: Biology teacher response to Curriculum Content items by number of years teaching experience.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
1st G, U1	3.95 (7)	3.94 (4)	3.99 (8)	3.62 (33)	1.17	3,48	0.330
1st G, U2	3.61 (6)	4.33 (3)	3.95 (7)	3.53 (32)	1.91	3,44	0.142
1st G, U3	3.93 (6)	4.30 (3)	4.11 (7)	3.70 (32)	<1	3,44	
1st G, U4	3.48 (6)	4.07 (3)	4.24 (7)	3.79 (31)	1.35	3,43	0.270
1st G, U5	3.49 (6)	4.12 (3)	4.27 (7)	3.73 (31)	1.45	3,43	0.242
2nd G, U1	4.50 (4)	4.18 (3)	4.19 (6)	4.02 (30)	<1	3,39	
2nd G, U2	4.69 (4)	4.17 (3)	3.83 (6)	3.93 (30)	1.38	3,39	0.263
2nd G, U3	4.55 (4)	4.36 (3)	4.34 (6)	4.08 (30)	<1	3,39	0.476
3rd G, U1	4.66 (2)	4.37 (4)	4.37 (6)	4.13 (30)	<1	3,38	
3rd G, U2	4.50 (2)	4.00 (4)	4.38 (6)	4.20 (30)	<1	3,38	
3rd G, U3	4.40 (2)	4.20 (4)	4.29 (6)	3.94 (33)	<1	3,41	
3rd G, U4	3.40 (4)	3.52 (4)	3.94 (6)	3.82 (33)	<1	3,43	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

I. Teaching Experience in Oman

1. Process of Curriculum Development

Table 179 presents the results obtained from the analyses of teacher and supervisor (of the shared subject matters in Arabic and English Languages only) response to process of curriculum development items as a function of the subject's teaching experience in Oman. Fewer than 5 supervisors within the general areas of instruction on Islamic Education, the arts, and the sciences were found at 2 or more levels of teaching experience in Oman, and consequently, a comparison of supervisors of these areas by teaching experience in Oman was not possible. However, the mean responses given by supervisors from these latter areas at each level of teaching experience in Oman are reported (when possible) in Table 179.

Statistically significant differences in the responses given to process of curriculum development items as a function of teaching experience in Oman were found, by one-way ANOVA, among teachers of the sciences [$F(3,305) = 3.41$, $p = 0.018$] only. In this case, the Scheffe pairwise comparison probe found teachers of the sciences with 1 to 3 years of teaching experience in Oman [mean response (+/- s.d.) = 3.09 (0.73)] to report statistically greater satisfaction with the process of curriculum development items than teachers of the sciences with 4 to 6 years of teaching experience in Oman [mean response (+/- s.d.) = 2.79

(0.79)]. No effect of teaching experience in Oman on the responses given to process of curriculum development items were found among teachers of the shared subject matters, teachers of the arts, or supervisors of the shared subject matters in Arabic and English Languages.

Table 179: Teacher and supervisor response to Curriculum Development items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
TEACHERS:							
Shared Subject Matters	3.09 (174)	2.84 (74)	2.95 (41)	3.16 (31)	2.37	3,316	0.071
Arts Subjects	3.05 (132)	2.76 (52)	3.09 (17)	2.74 (10)	2.16	3,207	0.094
Science Subjects	3.09 (197)	2.79 (66)	2.89 (26)	3.21 (20)	3.41	3,305	0.018*
SUPERVISORS:							
Shared Subject Matters	3.04 (23)	2.95 (5)	3.21 (3)	3.27 (4)	<1	3,31	
Islamic Education	2.40 (11)	2.97 (1)	---- (0)	---- (0)			
Arts Subjects	2.82 (21)	3.00 (2)	---- (0)	---- (0)			
Science Subjects	3.10 (24)	3.21 (4)	---- (0)	---- (0)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
The Scheffe pairwise comparison of the group means showed: * = 1-3 years to differ significantly from 4-6 years.

2. Curriculum Content

In the analysis of the effect of teaching experience in Oman on the responses given to curriculum content items by teachers of each subject matter, statistically significant

differences were found among Islamic Education teachers [$F(3,82) = 6.94$, $p < 0.001$], biology teachers [Third Grade unit 3 $F(3,41) = 2.97$, $p = 0.043$], and chemistry teachers [Grade 3 Unit 7 'Radios' $F(3,46) = 4.49$, $p = 0.008$].

Among general science teachers, no statistical analysis of the effect of teaching experience in Oman was possible since all but a few of these teachers had only taught in Oman for 1 to 3 years.

Among Islamic Education teachers, those that had 1 to 6 years of teaching experience in Oman [mean response (+/- s.d.) = 3.78 (0.84) and 3.61 (0.49) for teachers with 1 - 3 and 4 - 6 years teaching experience in Oman respectively] reported statistically greater levels of satisfaction with the Islamic Education curriculum content than those that had more than 10 years of teaching experience in Oman [mean response (+/- s.d.) = 2.55 (1.08)].

Among biology teachers, a statistically significant difference as a function of teaching experience in Oman was found in the analysis of the biology teachers' responses to third grade unit 3 items, however, the Scheffe post-hoc pairwise comparison of the group means in this analysis revealed no statistically significant group differences.

Among chemistry teachers, those with 1 to 3 years of teaching experience in Oman [mean response (+/- s.d.) = 4.22 (0.50)], reported statistically greater levels of satisfaction with unit 7 in third grade than those that had

4 to 6 years of teaching experience in Oman [mean response (+/- s.d.) = 3.55 (0.62)]. Teaching experience in Oman did not statistically differentiate the responses give by chemistry teachers to any other aspect of the chemistry curriculum content.

The mean responses given by teachers from each subject matter area to their curriculum content as a function of teaching experience in Oman are reported in Tables 180 through 191.

Table 180: Islamic Education teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In Islamic Education	3.78 (55)	3.61 (14)	3.10 (3)	2.55 (14)	6.94	3,82	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 1-3 years & 4-6 years to differ significantly from >10 years.

Table 181: Arabic Language teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In Arabic Language	3.55 (70)	3.31 (17)	3.48 (14)	3.45 (12)	<1	3,109	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 182: English Language teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In English Language	3.08 (46)	3.09 (42)	3.25 (24)	3.18 (5)	1.16	3,113	0.329

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 183: Mathematics teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.63 (12)	3.74 (9)	3.63 (32)	3.57 (59)	<1	3,108	
Construction	3.29 (65)	3.15 (32)	3.14 (7)	3.39 (8)	<1	3,108	
Procedures	3.55 (63)	3.36 (32)	3.29 (7)	3.29 (7)	<1	3,105	
Lerning & Teaching	3.36 (65)	3.31 (32)	3.50 (7)	3.64 (7)	<1	3,107	
1st G	3.45 (65)	3.34 (32)	3.75 (7)	3.43 (8)	<1	3,108	
2nd G	3.58 (61)	3.64 (30)	3.80 (7)	3.47 (8)	<1	3,102	
3rd G	3.64 (58)	3.74 (30)	3.74 (7)	3.35 (8)	1.03	3,99	0.381
2nd G, Arts Program	3.26 (53)	3.44 (28)	3.34 (7)	3.31 (8)	<1	3,92	
3rd G, Arts Program	3.27 (58)	3.10 (31)	3.03 (7)	3.11 (8)	<1	3,100	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 184: General Science teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.72 (21)	3.13 (4)	3.49 (3)	3.18 (2)			
Science & Scientists	3.90 (18)	3.33 (3)	4.00 (2)	2.00 (1)			
Evolution of Astronomy	4.10 (18)	4.04 (3)	3.44 (2)	3.40 (1)			
Transportation	4.15 (18)	3.00 (3)	3.50 (2)	3.33 (1)			
Health	4.18 (18)	4.00 (3)	3.30 (2)	4.20 (1)			
Science & World Food Problems	4.30 (18)	3.28 (3)	3.50 (2)	2.56 (1)			
Oil	4.22 (19)	4.19 (4)	3.81 (2)	3.00 (1)			
Solar Energy	4.07 (19)	3.54 (4)	3.83 (2)	2.75 (1)			
Nuclear Energy	3.92 (19)	2.94 (4)	4.00 (1)	2.50 (1)			
Environment & Pollution	4.04 (19)	3.98 (4)	3.79 (2)	2.45 (1)			
Meteorology & Forecasting	4.00 (19)	4.04 (4)	3.42 (2)	3.20 (1)			
2nd G, New Concepts	3.76 (15)	3.83 (2)	4.00 (2)	2.50 (1)			
3rd G, New Concepts	3.75 (19)	4.67 (3)	4.00 (2)	2.67 (1)			

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 185: History teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.69 (40)	3.61 (17)	4.06 (5)	3.67 (3)	<1	3,61	
2nd G	4.06 (36)	4.24 (16)	4.35 (5)	3.96 (3)	<1	3,56	
3rd G	3.75 (36)	3.85 (17)	3.74 (5)	3.57 (3)	<1	3,57	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 186: Geography teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.70 (46)	3.60 (19)	3.77 (7)	4.32 (1)	<1	3,69	
2nd G	3.85 (40)	3.89 (15)	3.94 (6)	4.50 (1)	<1	3,58	
3rd G	4.18 (39)	3.90 (14)	4.46 (7)	4.50 (1)	1.38	3,57	0.258
Contemporary Problems	4.00 (31)	4.02 (16)	3.93 (6)	4.33 (1)	<1	3,50	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 187: Human Culture teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.64 (24)	3.77 (7)	---- (0)	3.93 (2)	<1	2,30	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 188: Civic Education teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.80 (22)	3.49 (9)	4.04 (5)	3.15 (4)	1.38	3,36	0.266
1st G, Omani Society	4.56 (22)	4.04 (9)	4.63 (5)	4.19 (4)	1.92	3,36	0.143
2nd G, Arabic Society	4.19 (18)	4.10 (7)	4.23 (4)	3.97 (4)	<1	3,29	
3rd G, Muslim Nations	4.35 (18)	4.23 (8)	4.14 (4)	3.80 (4)	<1	3,30	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 189: Chemistry teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.47 (32)	3.42 (14)	3.64 (5)	3.58 (2)	<1	3,49	
1st G, U1	2.66 (31)	2.31 (13)	2.80 (5)	3.00 (2)	<1	3,47	
1st G, U2-4	3.42 (31)	3.67 (13)	3.47 (5)	3.67 (2)	<1	3,47	
1st G, U7	3.31 (31)	3.42 (13)	2.70 (5)	2.75 (2)	1.94	3,47	0.136
2nd G, U1	3.76 (31)	3.83 (12)	3.13 (5)	5.00 (1)	1.34	3,45	0.272
2nd G, U2	3.60 (31)	3.44 (12)	2.45 (5)	2.67 (1)	1.38	3,45	0.262
2nd G, U3-6	3.53 (31)	3.47 (12)	3.61 (5)	3.50 (1)	<1	3,45	
3rd G, U1-2	3.91 (30)	3.65 (13)	3.44 (5)	3.90 (2)	1.17	3,46	0.333
3rd G, U3	3.56 (30)	3.20 (13)	3.24 (5)	3.60 (2)	1.38	3,46	0.260
3rd G, U5-6	3.77 (30)	3.28 (13)	3.51 (5)	3.80 (2)	1.25	3,46	0.302
3rd G, U7	4.22 (30)	3.55 (13)	3.73 (5)	4.42 (2)	4.49	3,46	0.008*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: * = 1-3 years to differ significantly from 4-6 years.

Table 190: Physics teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
General	3.62 (47)	3.71 (5)	3.41 (5)	---- (0)	<1	2,54	
1st G, U1	3.52 (46)	3.93 (5)	3.10 (5)	---- (0)	1.73	2,53	0.188
1st G, U2	3.77 (46)	3.80 (5)	3.87 (5)	---- (0)	<1	2,53	
1st G, U3	3.47 (46)	3.60 (5)	2.73 (5)	---- (0)	2.19	2,53	0.121
2nd G, U1	3.55 (44)	3.75 (4)	3.33 (5)	---- (0)	<1	2,50	
2nd G, U2	3.42 (44)	3.67 (4)	3.13 (5)	---- (0)	<1	2,50	
2nd G, U3	3.55 (44)	3.83 (4)	3.00 (5)	---- (0)	1.73	2,50	0.187
3rd G, U1	3.78 (44)	3.88 (4)	3.48 (5)	---- (0)	<1	2,50	
3rd G, U2	3.61 (44)	3.13 (4)	2.93 (5)	---- (0)	2.60	2,50	0.085
3rd G, U3	3.50 (44)	3.00 (4)	3.13 (5)	---- (0)	1.28	1,50	0.288

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 191: Biology teacher response to Curriculum Content items by number of years teaching in Oman.

	NUMBER OF YEARS						
	1-3 $\bar{X}$ (n)	4-6 $\bar{X}$ (n)	7-10 $\bar{X}$ (n)	>10 $\bar{X}$ (n)	F	df	p
Concepts Taught In:							
1st G, U1	3.78 (30)	3.37 (10)	4.03 (6)	3.93 (6)	1.83	3,48	0.155
1st G, U2	3.58 (26)	3.77 (10)	3.75 (6)	3.64 (6)	<1	3,44	
1st G, U3	3.78 (26)	3.67 (10)	3.89 (6)	4.23 (6)	<1	3,44	
1st G, U4	3.69 (26)	3.72 (9)	4.12 (6)	4.33 (6)	1.68	3,43	0.185
1st G, U5	3.69 (26)	3.63 (9)	4.17 (6)	4.20 (6)	1.30	3,43	0.287
2nd G, U1	3.97 (25)	4.18 (7)	4.19 (5)	4.44 (6)	<1	3,39	
2nd G, U2	3.93 (25)	3.82 (7)	3.95 (5)	4.58 (6)	1.46	3,39	0.239
2nd G, U3	3.99 (25)	4.40 (7)	4.41 (5)	4.51 (6)	1.80	3,39	0.164
3rd G, U1	4.06 (23)	4.23 (8)	4.52 (5)	4.54 (6)	1.67	3,38	0.191
3rd G, U2	4.04 (23)	4.46 (8)	4.31 (5)	4.52 (6)	1.78	3,38	0.167
3rd G, U3	3.83 (23)	3.93 (9)	4.37 (5)	4.48 (8)	2.97	3,41	0.043+
3rd G, U4	3.68 (25)	3.57 (9)	4.02 (5)	4.14 (8)	1.67	3,43	0.189

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different.

VII. A COMPARISON BY ATTITUDE TOWARD FIVE EDUCATIONAL CONCEPTS (FACTORS) OF THE RESPONSES GIVEN TO PROCESS OF CURRICULUM DEVELOPMENT AND CURRICULUM CONTENT ITEMS BY TEACHERS AND/OR SUPERVISORS: ONE-WAY ANOVA.

The responses given to questionnaire items addressing the process of curriculum development (Part II Section A part 1) by teachers and supervisors and the specific content of the curriculum (Part II Section A part 2) by teachers from each subject matter area were assessed in light of the subjects' response to the five factors identified from Part I Section B part 1 "Opinion Survey" of the questionnaire. The analysis of the CURRICULUM CONTENT items by factor is identical to the analysis of THEORY, PROCESS and PRACTICE, or RESOURCE questionnaire items by factor described previously.

Below the results obtained from the one-way ANOVA analyses are presented by Factor. In all cases of statistical significance, a positive relationship was found between the rating of a factor and the magnitude of the responses given to the group of items being assessed, indicating that the degree of satisfaction (or agreement) with the curriculum content was greater if the subjects had found the concept described by the factor very important. This type of relationship suggests that the curriculum reflects the concept described by the factor, since one would predict greater satisfaction with the curriculum if its structure and/or practice was consistent with the subject's attitude.

A. Factor I: The importance of developing the students' personality

1. Process of Curriculum Development

Statistically significant differences in the responses given to process of curriculum development items as a function of attitude toward Factor I were found among teachers of the arts [$F(1,209) = 12.43$, $p < 0.001$] and supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 8.15$, $p = 0.001$] (Table 192). Among these educators, those who rated the use of the holistic approach to education as very important also agreed most strongly with the process of curriculum development items.

Among teachers of the shared subject matters [$F(1,297) = 1.51$, $p = 0.220$], teachers of the sciences [$F(1,304) < 1$], supervisors of the sciences [$F(1,26) < 1$], and supervisors of Islamic Education [$F(1,10) = 1.32$, $p = 0.277$], no statistically significant differences were found between the subjects' attitudes toward the holistic approach and their satisfaction with the process of curriculum development (Table 192). Supervisors of the arts were not distributed across two or three levels of Factor I in sufficient number to permit analysis.

Table 192: Teacher and supervisor response to Curriculum Development items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	3.08 (196)	2.97 (103)		1.51	1,297	0.220
Arts Subjects	3.06 (171)	2.58 (40)		12.43	1,209	<0.001*
Science Subjects	3.03 (218)	2.98 (88)		<1	1,304	
SUPERVISORS:						
Shared Subject Matters	3.43 (20)	2.63 (12)	2.36 (3)	8.15	2,32	0.001**
Islamic Education	---- (0)	2.63 (5)	2.32 (7)	1.32	1,10	0.277
Arts Subjects	2.90 (20)	2.40 (3)	---- (0)			
Science Subjects	3.18 (18)	3.00 (10)	---- (0)	<1	1,26	

^Only supervisors were assessed at three levels of this variable.
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant
The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

2. Curriculum Content

Tables 193 through 204 give the mean responses to specific curriculum content questionnaire items in each of the twelve subject matter areas by teachers that rated Factor I as either highly important or moderately important. Also given in these tables are the results from the one-way ANOVA comparing the mean responses of teachers that strongly or moderately supported Factor I.

Listed below are those analyses that produced significant differences. In each case, the significant

difference showed that the subjects' attitudes toward Factor I predicted their responses to the curriculum content being assessed. In all of these instances, subjects that rated Factor I as very important also gave the greatest level of agreement with the curriculum content, suggesting that the curriculum content under analysis is appropriate to an educational system that values the holistic approach to education.

Statistically significant differences in the responses given to the following curriculum content items were found between teachers that rated the importance of the holistic approach as either highly important or important. In all cases, those teachers that gave the greatest rating to Factor I also gave the greatest level of satisfaction to the curriculum content. No statistics are reported in the lists given below, instead, the reader should refer to the tables given in parentheses for the F values as well as the mean responses by teachers that found the Factor either highly important or moderately important.

Islamic Education Curriculum Content [$F(1,84) = 106.69$, $p < 0.001$] (Table 193)

Arabic Language Curriculum Content [$F(1,111) = 7.79$, $p = 0.006$] (Table 194)

Mathematics Curriculum Content in (Table 196)
- Third grade concept [$F(1,101) = 13.54$, $p < 0.001$]
- Second grade Art [$F(1,94) = 4.05$, $p = 0.047$]

General Sciences Curriculum Content in (Table 197)
- General [$F(1,28) = 4.20$, $p = 0.050$]
- Science and the World Food Problems [$F(1,22) = 5.18$, $p = 0.033$]

- New Concepts in Second Grade [F(1,18)=5.59, p = 0.030]

History Curriculum Content in (Table 198)
- General [F(1,63) = 19.13, p < 0.001]
- Second Grade Art [F(1,58) = 13.18, p < 0.001]
- Third Grade Art [F(1,59) = 14.82, p < 0.001]

Geography Curriculum Content in (Tables 199)
- General [F(1,71) = 10.43, p = 0.002]
- Second Grade Art [F(1,59) = 5.48, p = 0.023]
- Third Grade Art [F(1,58) = 5.11, p = 0.028]

Human Cultures Curriculum Content [F(1,31) = 5.21, p = 0.030] (Table 200)

Civic Education Curriculum Content in (Table 201)
- General [F(1,38) = 5.75, p = 0.022]
- Omani Society [F(1,38) = 8.33, p = 0.006]
- Arabic Society [F(1,31) = 12.32, p = 0.001]
- Muslim Nations [F(1,32) = 12.21, p = 0.001]

Physics Curriculum Content in (Table 203)
- Third grade Unit 1 [F(1,51) = 6.68, p = 0.013]

No statistically significant differences as a function of the teachers' attitudes toward Factor I were found in the analyses of the following curriculum content items.

English Language curriculum content [F(1,114) < 1] (Table 195)

Mathematics Curriculum Content in (Table 196)
- General [F(1,110) < 1]
- Math construction [F(1,110) < 1]
- Math procedure [F(1,107) < 1]
- Learning and Teaching [F(1,109) < 1]
- First Grade math concepts [F(1,110) < 1]
- Second Grade math concepts [F(1,104) = 1.30, p = 0.257]
- Third Grade Art [F(1,102) = 1.04, p = 0.310]

General Sciences Curriculum Content in (Table 197)
- Science and Scientists [F(1,22) = 1.77, p = 0.290]
- Evolution of Astronomy [F(1,22) = 2.36, p = 0.139]
- Transportation [F(1,22) = 1.67, p = 0.209]
- Health [F(1,22) = 2.68, p = 0.116]
- Oil [F(1,24) = 1.39, p = 0.250]
- Solar Energy [F(1,24) = 1.15, p = 0.293]
- Nuclear Energy [F(1,23) < 1]
- Environment and Pollution [F(1,24) < 1]
- Meteorology and Climate Forecast [F(1,24) < 1]
- New Concepts in Third Grade [F(1,23) < 1]

Geography Curriculum Content in (Table 199)
- Contemporary Problems [F(1,51) < 1]

Chemistry Curriculum Content in (Table 202)

- General [F(1,51) < 1]
- First Grade Units 1 [F(1,49) < 1]
  2-4 [F(1,49) = 1.36, p = 0.248]
  7 [F(1,49) < 1]
- Second Grade Units 1 [F(1,47) < 1]
  2,[F(1,47) < 1]
  3-6 [F(1,47) = 2.28, p = 0.138]
- Third Grade Units 1-2 [F(1,48) < 1]
  3 [F(1,48) = 1.35, p = 0.251]
  5-6 [F(1,48) < 1]
  7 [F(1,48) < 1]

Physics Curriculum Content in (Table 203)
- General [F(1,55) < 1]
- First Grade Units 1 [F(1,54) = 1.62, p = 0.209]
  2 [F(1,54) < 1]
  3 [F(1,54) < 1]
- Second Grade Units 1 [F(1,51) < 1]
  2 [F(1,51) < 1]
  3 [F(1,51) < 1]
- Third Grade Units 2 [F(1,51) = 1.978 p = 0.166]
  3 [F(1,51) < 1]

Biology Curriculum Content (Table 204)
- First Grade Units 1 [F(1,50) < 1]
  2 [F(1,46) < 1]
  3 [F(1,46) < 1]
  4 [F(1,45) < 1]
  5 [F(1,45) < 1]
- Second Grade Units 1 [F(1,41) < 1]
  2 [F(1,41) < 1]
  3 [F(1,41) < 1]
- Third Grade Units 1 [F(1,40) < 1]
  2 [F(1,40) < 1]
  3 [F(1,43) < 1]
  4 [F(1,45) < 1]

Table 193: Islamic Education teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Islamic Education	4.12 (53)	2.58 (33)	106.69	1,84	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Arabic Language	3.61 (78)	3.24 (35)	7.79	1,111	0.006*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 195: English Language teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in English Language	3.15 (62)	3.10 (54)	<1	1,114	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 196: Mathematics teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught In:					
General	3.64 (82)	3.55 (30)	<1	1,110	
Construction	3.28 (82)	3.16 (30)	<1	1,110	
Procedures	3.51 (79)	3.33 (30)	<1	1,107	
Learning & Teaching	3.37 (81)	3.38 (30)	<1	1,109	
1st G	3.47 (82)	3.33 (30)	<1	1,110	
2nd G	3.65 (77)	3.49 (29)	1.30	1,104	0.257
3rd G	3.77 (75)	3.33 (28)	13.54	1,101	<0.001*
2nd G, Arts Program	3.42 (70)	3.06 (26)	4.05	1,94	0.047*
3rd G, Arts Program	3.24 (75)	3.07 (29)	1.04	1,102	0.310

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 197: General Science teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught In:					
General	3.77 (19)	3.27 (11)	4.20	1,28	0.050*
Science & Scientists	3.89 (14)	3.58 (10)	1.17	1,22	0.290
Evolution of Astronomy	4.18 (14)	3.77 (10)	2.36	1,22	0.139
Transportation	4.10 (14)	3.67 (10)	1.67	1,22	0.209
Health	4.26 (14)	3.85 (10)	2.68	1,22	0.116
Science & world Food Problems	4.34 (14)	3.61 (10)	5.18	1,22	0.033*
Oil	4.26 (15)	3.98 (11)	1.39	1,24	0.250
Solar Energy	4.07 (15)	3.72 (11)	1.15	1,24	0.293
Nuclear Energy	3.85 (14)	3.52 (11)	<1	1,23	
Environment & Pollution	4.06 (15)	3.81 (11)	<1	1,24	
Meteorology & Forecasting	3.94 (15)	3.91 (11)	<1	1,24	
2nd G, New Concepts	4.02 (11)	3.37 (9)	5.59	1,18	0.030*
3rd G, New Concepts	3.93 (15)	3.70 (10)	<1	1,23	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 198: History teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught In:					
General	3.84 (54)	3.01 (11)	19.13	1,63	<0.001*
2nd G	4.24 (51)	3.48 (9)	13.18	1,58	<0.001*
3rd G	3.91 (50)	3.13 (11)	14.82	1,59	<0.001*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 199: Geography teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught In:					
General	3.79 (59)	3.27 (14)	10.43	1,71	0.002*
2nd G	3.99 (48)	3.50 (13)	5.48	1,59	0.023*
3rd G	4.23 (50)	3.73 (10)	5.11	1,58	0.028*
Contemporary Problems	4.03 (43)	3.90 (10)	<1	1,51	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 200: Human Culture teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.86 (24)	3.22 (9)	5.21	1,31	0.030*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 201: Civic Education teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.81 (34)	3.03 (6)	5.75	1,38	0.022*
1st G, Omani Society	4.52 (34)	3.79 (6)	8.33	1,38	0.006*
2nd G, Arabic Society	4.28 (29)	3.25 (4)	12.32	1,31	0.001*
3rd G, Muslim Nations	4.40 (28)	3.46 (6)	12.21	1,32	0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 202: Chemistry teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.46 (39)	3.54 (14)	<1	1,51	
1st G, U1	2.53 (37)	2.77 (14)	<1	1,49	
1st G, U2-4	3.41 (37)	3.71 (14)	1.36	1,49	0.248
1st G, U7	3.22 (37)	3.36 (14)	<1	1,49	
2nd G, U1	3.70 (35)	3.83 (14)	<1	1,47	
2nd G, U2	3.43 (35)	3.40 (14)	<1	1,47	
2nd G, U3-6	3.44 (35)	3.74 (14)	2.28	1,47	0.138
3rd G, U1-2	3.75 (36)	3.90 (14)	<1	1,48	
3rd G, U3	3.38 (36)	3.59 (14)	1.35	1,48	0.251
3rd G, U5-6	3.63 (36)	3.59 (14)	<1	1,48	
3rd G, U7	3.95 (36)	4.13 (14)	<1	1,48	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 203: Physics teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.63 (36)	3.58 (21)	<1	1,55	
1st G, U1	3.61 (35)	3.36 (21)	1.62	1,54	0.209
1st G, U2	3.82 (35)	3.71 (21)	<1	1,54	
1st G, U3	3.48 (35)	3.32 (21)	<1	1,54	
2nd G, U1	3.51 (33)	3.61 (20)	<1	1,51	
2nd G, U2	3.43 (33)	3.38 (20)	<1	1,51	
2nd G, U3	3.53 (33)	3.52 (20)	<1	1,51	
3rd G, U1	3.94 (33)	3.47 (20)	6.68	1,51	0.013*
3rd G, U2	3.62 (33)	3.33 (20)	1.98	1,51	0.166
3rd G, U3	3.42 (33)	3.44 (20)	<1	1,51	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 204: Biology teacher response to Curriculum Content items as a function of Factor I: the importance of using a holistic approach toward the development of the student's personality.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, U1	3.76 (40)	3.69 (12)	<1	1,50	
1st G, U2	3.63 (37)	3.71 (11)	<1	1,46	
1st G, U3	3.85 (37)	3.77 (11)	<1	1,46	
1st G, U4	3.87 (36)	3.72 (11)	<1	1,45	
1st G, U5	3.85 (36)	3.67 (11)	<1	1,45	
2nd G, U1	4.15 (34)	3.92 (9)	<1	1,41	
2nd G, U2	4.04 (34)	3.89 (9)	<1	1,41	
2nd G, U3	4.19 (34)	4.16 (9)	<1	1,41	
3rd G, U1	4.23 (32)	4.18 (10)	<1	1,40	
3rd G, U2	4.27 (32)	4.06 (10)	<1	1,40	
3rd G, U3	4.01 (33)	4.06 (12)	<1	1,43	
3rd G, U4	3.81 (35)	3.68 (12)	<1	1,45	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

B. Factor II: The importance of using a democratic approach in the classroom.

1. Process of Curriculum Development

Statistically significant differences in the responses given to process of curriculum development items as a function of attitude toward Factor II were found among all teacher groups [shared subject matters $F(1,280) = 23.35$, $p < 0.001$; arts $F(1,208) = 11.03$, $p = 0.001$; and sciences $F(1,299) = 17.51$, $p < 0.001$] (Table 205). Among these teacher groups, those who rated the use of a democratic approach to classroom management as very important also agreed most strongly with the process of curriculum development items.

Among supervisors of the shared subject matters in Arabic and English Languages [$F(2,32) = 3.64$, $p = 0.038$, Scheffe $p > 0.05$], supervisors of arts [$F(1,21) = 3.62$, $p = 0.071$], and supervisors of the sciences [$F(1,26) < 1$], no statistically significant differences were found between the subjects' attitudes toward the importance of a democratic classroom management policy and their satisfaction with the process of curriculum development in Oman (Table 205). Supervisors of Islamic Education were not distributed across two or three levels of Factor II in sufficient number to permit analysis.

Table 205: Teacher and supervisor response to Curriculum Development items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	3.16 (196)	2.71 (86)		23.35	1,280	<0.001*
Arts Subjects	3.06 (170)	2.60 (40)		11.03	1,208	0.001*
Science Subjects	3.13 (216)	2.74 (85)		17.51	1,299	<0.001*
SUPERVISORS:						
Shared Subject Matters	3.35 (19)	2.75 (14)	2.54 (2)	3.64	2,32	0.038+
Islamic Education	---- (0)	---- (0)	2.45 (12)			
Arts Subjects	2.92 (18)	2.50 (5)	---- (0)	3.62	1,21	0.071
Science Subjects	3.13 (20)	3.08 (8)	---- (0)	<1	1,26	

^Only supervisors were assessed at three levels of this variable.
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant
The Scheffe pairwise comparison of the group means showed: + = no two groups to differ significantly; ** = strongly agree to differ significantly from neutral.

2. Curriculum Content

Tables 206 through 217 give the mean responses given to specific curriculum content questionnaire items in each of the twelve subject matter areas by teachers that rated Factor II as either highly important or moderately important. Also given in these tables are the results from the one-way ANOVA comparing the mean responses.

Listed below are those analyses that produced significant differences. In each case the significance difference showed that the subjects' attitude toward Factor II predicted their response to the curriculum content being assessed. And in all of these instances, subjects that rated Factor II as very important also gave the greatest level of agreement to the curriculum content, suggesting that the curriculum content under analysis is appropriate to an educational system that values the use of a democratic classroom management policy. Statistically significant differences in the response given to the following curriculum content items were found between teachers that rated the importance of democratic classroom management policy as either very important or important. In all cases, those teachers that gave the greatest rating to Factor II also gave the greatest level of satisfaction to the curriculum content. No statistics are reported in the lists given below, instead the reader should refer to the tables given in parentheses for the F values as well as the mean responses by teachers that found the Factor either highly important or moderately important.

Islamic Education Curriculum Content [$F(1,84) = 69.28$, $p < 0.001$] (Table 206)

Arabic Language Curriculum Content [$F(1,111) = 24.92$, $p < 0.001$] (Table 207)

Mathematics Curriculum Content in (Table 209)

- General $F(1,110) = 17.84$, $p < 0.001$]
- Math Construction [$F(1,110) = 18.00$, $p < 0.001$]
- Math Procedure [$F(1,107) = 9.38$, $p = 0.003$]
- Learning and teaching [$F(1,109) = 6.04$,

p = 0.016]
- First Grade concept F(1,110) = 4.21, p = 0.042]
- Second Grade concept F(1,104) = 9.82, p = 0.002]
- Third grade concept F(1,101) = 5.67, p = 0.019]

General Sciences Curriculum Content in (Table 210)
- General [F(1,28) = 7.59, p = 0.010]
- Evolution of Astronomy [F(1,22) = 5.58, p = 0.027]
- Transportation [F(1,22) = 8.81, p = 0.007]
- Science and the World Food Problems [F(1,22) = 13.12, p = 0.002]
- Oil [F(1,24) = 9.18, p = 0.006]
- Solar Energy [F(1,24) = 12.83, p = 0.002]
- Nuclear Energy [F(1,23) = 6.50, p = 0.018]
- Environment and Pollution [F(1,24)= 7.85, p = 0.010]
- Meteorology and Climate Forecast [F(1,24) = 6.45, p = 0.018]
- New Concepts in Second Grade [F(1,18) = 7.03, p=0.016]

History Curriculum Content (Table 211)
- General [F(1,63) = 11.52, p = 0.001]
- Second Grade [F(1,58) = 5.10, p = 0.028]
- Third Grade [F(1,59) = 7.64, p = 0.008]

Geography Curriculum Content in (Table 212)
-Contemporary Problems [F(1,51) = 4.04, p = 0.050]

Human Cultures Curriculum Content [F(1,31) = 10.20, p = 0.003] (Table 213)

Civic Education Curriculum Content (Table 214)
- General [F(1,38) = 9.90, p = 0.003]
- Omani Society [F(1,38) = 7.64, p = 0.009]

Chemistry Curriculum Content (Table 215)
- First Grade Units 1 [F(1,49) = 6.09, p = 0.017]
7 [F(1,49) = 4.17, p = 0.047]

Physics Curriculum Content (Table 216)
-General [F(1,55) = 12.01, p = 0.001]
-First Grade Unit 3 [F(1,54) = 5.03, p = 0.029]
-Third grade Units 1 [F(1,51) = 7.39, p = 0.009]
3 [F(1,51) = 6.52, p = 0.014]

Biology Curriculum Content (Table 217)
-First Grade Units 1 [F(1,47) = 10.03, p = 0.003]
3 [F(1,43) = 5.29, p = 0.027]

No statistically significant differences as a function of the teachers' attitudes toward Factor II were found in the analyses of the following curriculum content items.

English Language Curriculum Content [F(1,112) = 1.93, p = 0.168] (Table 208)

Mathematics Curriculum Content (Table 209)
- Second Grade Art [F(1,94) = 1.05, p = 0.307]
- Third Grade Arts [F(1,102) < 1]

General Sciences Curriculum Content in (Table 210)
- Science and Scientists [F(1,22) = 2.04, p = 0.168]
- Health [F(1,22) = 2.84, p = 0.106]
- New Concepts in Third Grade [F(1,23) = 1.63, p=0.214]

Geography Curriculum Content (Table 212)
- General [F(1,71) = 3.71, p = 0.058]
- Second Grade Arts [F(1,59) = 1.27, p = 0.265]
- Third Grade Arts [F(1,58) = 3.57, p - 0.064]

Civic Education Curriculum Content (Table 214)
- Arabic Society [F(1,31) = 1.87, p = 0.182]
- Muslim Nations [F(1,32) = 3.84, p = 0.059]

Chemistry Curriculum Content (Table 215)
- General [F(1,51) < 1]
- First Grade Unit 2-4 [F(1,49) < 1]
- Second Grade Units 1 [F(1,47) < 1]
  2 [F(1,47) = 1.57, p 0.217]
  3-6 [F(1,47) < 1]
- Third Grade Units 1-2 [F(1,48) = 3.08, p = 0.086]
  3 [F(1,48) = 3.55, p = 0.066]
  5 - 6 [F(1,48) = 1.84, p = 0.181]
  7 [F(1,48) = 3.55, p = 0.066]

Physics Curriculum Content (Table 216)
- First Grade Units 1 [F(1,54) = 3.96, p = 0.052]
  2 [F(1,54) < 1]
- Second Grade Units 1 [F(1,51) = 1.20, p = 0.279]
  2 [F(1,51) = 2.76, p = 0.103]
  3 [F(1,51) = 1.76, p = 0.190]
- Third Grade Unit 2 [F(1,51) = 1.26, p = 0.268]

Biology Curriculum Content (Table 217)
- First Grade Units 2 [F(1,43) = 1.21, p = 0.277]
  4 [F(1,42) = 2.84, p = 0.100]
  5 [F(1,42) = 3.28, p = 0.077]
- Second Grade Units 1 [F(1,38) = 1.76, p = 0.192]
  2 [F(1,38) < 1]
  3 [F(1,38) < 1]
- Third Grade Units 1 [F(1,37) = 2.18, p = 0.149]
  2 [F(1,37) < 1]
  3 [F(1,40) = 2.68, p = 0.109]
  4 [F(1,42) = 3.87, p = 0.056]

Table 206: Islamic Education teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Islamic Education	4.06 (53)	2.68 (33)	69.28	1,84	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 207: Arabic Language teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Arabic Language	3.70 (75)	3.10 (38)	24.92	1,111	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 208: English Language teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in English Language	3.16 (65)	3.06 (49)	1.93	1,112	0.168

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 209: Mathematics teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.80 (78)	3.19 (34)	17.84	1,110	<0.001*
Construction	3.47 (78)	2.73 (34)	18.00	1,110	<0.001*
Procedures	3.63 (76)	3.06 (33)	9.38	1,107	0.003*
Learning & Teaching	3.51 (78)	3.06 (33)	6.04	1,109	0.016*
1st G	3.52 (78)	3.24 (34)	4.21	1,110	0.042*
2nd G	3.73 (73)	3.33 (33)	9.82	1,104	0.002*
3rd G	3.74 (72)	3.45 (31)	5.67	1,101	0.019*
2nd G, Arts Program	3.38 (65)	3.20 (31)	1.05	1,94	0.307
3rd G, Arts Program	3.17 (71)	3.23 (33)	<1	1,102	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 210: General Science teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.85 (17)	3.23 (13)	7.59	1,28	0.010*
Science & Scientists	3.94 (13)	3.54 (11)	2.04	1,22	0.168
Evolution of Astronomy	4.28 (13)	3.70 (11)	5.58	1,22	0.027*
Transportation	4.31 (13)	3.45 (11)	8.81	1,22	0.007*
Health	4.28 (13)	3.86 (11)	2.84	1,22	0.106
Science & world Food Problems	4.50 (13)	3.48 (11)	13.12	1,22	0.002*
Oil	4.43 (14)	3.80 (12)	9.18	1,24	0.006*
Solar Energy	4.36 (14)	3.41 (12)	12.83	1,24	0.002*
Nuclear Energy	4.13 (13)	3.25 (12)	6.50	1,23	0.018*
Environment & Pollution	4.28 (14)	3.56 (12)	7.85	1,24	0.010*
Meteorology & Forecasting	4.27 (14)	3.53 (12)	6.45	1,24	0.018*
2nd G, New Concepts	4.11 (9)	3.41 (11)	7.03	1,18	0.016*
3rd G, New Concepts	4.08 (13)	3.58 (12)	1.63	1,23	0.214

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 211: History teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.81 (55)	3.10 (10)	11.52	1,63	0.001*
2nd G	4.20 (52)	3.67 (8)	5.10	1,58	0.028*
3rd G	3.86 (52)	3.22 (9)	7.64	1,59	0.008*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 212: Geography teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.75 (58)	3.44 (15)	3.71	1,71	0.058
2nd G	3.94 (48)	3.69 (13)	1.27	1,59	0.265
3rd G	4.23 (46)	3.86 (14)	3.57	1,58	0.064
Contemporary Problems	4.12 (40)	3.68 (13)	4.04	1,51	0.050*

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 213: Human Culture teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.91 (24)	3.08 (9)	10.20	1,31	0.003*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 214: Civic Education teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.86 (33)	2.94 (7)	9.90	1,38	0.003*
1st G, Omani Society	4.53 (33)	3.86 (7)	7.64	1,38	0.009*
2nd G, Arabic Society	4.21 (28)	3.80 (5)	1.87	1,31	0.182
3rd G, Muslim Nations	4.35 (27)	3.80 (7)	3.84	1,32	0.059

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.51 (37)	3.40 (16)	<1	1,51	
1st G, U1	2.40 (35)	3.02 (16)	6.09	1,49	0.017*
1st G, U2-4	3.55 (35)	3.36 (16)	<1	1,49	
1st G, U7	3.13 (35)	3.53 (16)	4.17	1,49	0.047*
2nd G, U1	3.75 (33)	3.73 (16)	<1	1,47	
2nd G, U2	3.58 (33)	3.10 (16)	1.57	1,47	0.217
2nd G, U3-6	3.56 (33)	3.45 (16)	<1	1,47	
3rd G, U1-2	3.89 (35)	3.56 (15)	3.08	1,48	0.086
3rd G, U3	3.54 (35)	3.20 (15)	3.55	1,48	0.066
3rd G, U5-6	3.72 (35)	3.39 (15)	1.84	1,48	0.181
3rd G, U7	4.11 (35)	3.74 (15)	3.55	1,48	0.066

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 216: Physics teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.76 (44)	3.13 (13)	12.01	1,55	0.001*
1st G, U1	3.62 (43)	3.18 (13)	3.96	1,54	0.052
1st G, U2	3.83 (43)	3.62 (13)	<1	1,54	
1st G, U3	3.54 (43)	3.00 (13)	5.03	1,54	0.029*
2nd G, U1	3.60 (41)	3.35 (12)	1.20	1,51	0.279
2nd G, U2	3.51 (41)	3.08 (12)	2.76	1,51	0.103
2nd G, U3	3.59 (41)	3.28 (12)	1.76	1,51	0.190
3rd G, U1	3.90 (40)	3.35 (13)	7.39	1,51	0.009*
3rd G, U2	3.57 (40)	3.31 (13)	1.26	1,51	0.268
3rd G, U3	3.57 (40)	2.99 (13)	6.52	1,51	0.014*

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 217: Biology teacher response to Curriculum Content items as a function of Factor II: the importance of a democratic classroom management policy.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, U1	3.86 (38)	3.23 (11)	10.03	1,47	0.003*
1st G, U2	3.71 (35)	3.43 (10)	1.21	1,43	0.277
1st G, U3	3.98 (35)	3.27 (10)	5.29	1,43	0.027*
1st G, U4	3.94 (34)	3.49 (10)	2.84	1,42	0.100
1st G, U5	3.93 (34)	3.42 (10)	3.28	1,42	0.077
2nd G, U1	4.19 (32)	3.84 (8)	1.76	1,38	0.192
2nd G, U2	4.07 (32)	3.78 (8)	<1	1,38	
2nd G, U3	4.20 (32)	4.08 (8)	<1	1,38	
3rd G, U1	4.27 (30)	3.93 (9)	2.18	1,37	0.149
3rd G, U2	4.26 (30)	4.10 (9)	<1	1,37	
3rd G, U3	4.09 (31)	3.73 (11)	2.68	1,40	0.109
3rd G, U4	3.86 (33)	3.43 (11)	3.87	1,42	0.056

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

C. Factor III: The importance of using a student-centered curriculum.

1. Process of Curriculum Development

Statistically significant differences in the responses given to process of curriculum development items as a function of attitude toward Factor III were found among all teacher groups [shared subject matters $F(1,290) = 13.98$, $p < 0.001$; arts $F(1,207) = 12.36$, $p < 0.001$; and sciences

F(1,300) = 9.66, p = 0.002] and among supervisors of the shared subject matters in Arabic and English Language [F(2,32) = 8.90, p < 0.001] (Table 203). Among these groups, those who rated a student-centered curriculum as very important also agreed most strongly with the process of curriculum development items.

Table 218: Teacher and supervisor response to Curriculum Development items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	3.14 (203)	2.79 (89)		13.98	1,290	<0.001*
Arts Subjects	3.05 (171)	2.57 (38)		12.36	1,207	<0.001*
Science Subjects	3.08 (244)	2.75 (58)		9.66	1,300	0.002*
SUPERVISORS:						
Shared Subject Matters	3.47 (19)	2.63 (14)	2.35 (2)	8.90	2,32	<0.001**
Islamic Education	---- (0)	2.97 (1)	2.40 (11)			
Arts Subjects	2.85 (17)	2.77 (6)	---- (0)	<1	1,21	
Science Subjects	3.13 (21)	3.05 (7)	---- (0)	<1	1,26	

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

Among supervisors of the arts [F(1,21) < 1] and supervisors of the sciences [F(1,26) < 1], no statistically significant differences were found between the subjects' attitudes toward the importance of a student-centered curriculum and their satisfaction with the process of curriculum development in Oman (Table 218). Supervisors of Islamic Education were not distributed across two or three levels of Factor III in sufficient number to permit analysis.

2. Curriculum Content

Tables 219 through 230 list the mean responses given to specific curriculum content questionnaire items in each of the twelve subject matter areas by teachers that rated Factor III as either highly important or moderately important. Also given in these tables are the results from the one-way ANOVA comparing these mean responses.

Listed below are those analyses that produced significant differences. In each case the significant difference suggested that the subjects' attitudes toward Factor III predicted their response to the curriculum content being assessed. And in all of these instances, indicating that rated Factor III was very important also gave the greatest level of agreement with the curriculum content, suggesting that the curriculum content under analysis is appropriate to an educational system that values the use of a student-centered curriculum.

Statistically significant differences in the responses given to the following curriculum content items were found between teachers that rated the importance of a student-centered curriculum as either very important or important. In all cases, those teachers that gave the greatest rating to factor III also gave the greatest level of satisfaction with the curriculum content. No statistics are reported in the lists given below; instead, the reader should refer to the tables given in parentheses for the F values as well as the mean responses by teachers that found the Factor either highly important or moderately important.

Islamic Education Curriculum Content [$F(1,84) = 95.67$, $p < 0.001$] (Table 219)

Arabic Language Curriculum Content [$F(1,111) = 14.08$, $p < 0.001$] (Table 220)

English Language Curriculum Content [$F(1,112)$ 12.55, $p < 0.001$] (Table 221)

Mathematics Curriculum Content in (Table 222)
- -First Grade concept [$F(1,110) = 8.01$, $p = 0.006$]
- -Second Grade concept [$F(1,104) = 20.47$, $p < 0.001$]

General Sciences Curriculum Content in (Table 223)
- - General [$F(1,28) = 4.32$, $p = 0.047$]
- - Science and the World Food Problems [$F(1,22) = 5.80$, $p = 0.025$]

History Curriculum Content (Table 224)
- -General [$F(1,63) = 10.26$, $p = 0.002$]
- -Third Grade Art [$F(1,59) = 9.46$, $p = 0.003$]

Geography Curriculum Content in (Table 225)
- -General [$F(1,71) = 4.05$, $p = 0.048$]
- -Second Grade Art [$F(1,59) = 7.59$, $p = 0.008$]
- -Contemporary Problems [$F(1,51) = 7.11$, $p = 0.010$]

Human Cultures Curriculum Content [$F(1,31) = 7.61$, $p = 0.010$] (Table 226)

Civic Education Curriculum Content (Table 227)
- - General [$F(1,38) = 8.49$, $p = 0.006$]
- - Omani Society [$F(1,38) = 5.38$, $p = 0.026$]
- - Arabic Society [$F(1,31) = 17.12$, $p < 0.001$]
- - Muslim Nations [$F(1,32) = 16.51$, $p < 0.001$]

Biology Curriculum Content (Table 230)

-First Grade Unit 1 [F(1,47) = 9.70, p = 0.003]
4 [F(1,42) = 5.54, p = 0.023]
5 [F(1,42) = 4.29, p = 0.044]
-Third Grade Unit 1 [F(1,37) = 4.75, p = 0.036]
2 [F(1,37) = 6.29, p = 0.017]

No statistically significant differences as a function of the teachers' attitudes toward Factor III were found in the analyses of the following curriculum content items.

Mathematics curriculum content (Table 222)
-General [F(1,110) = 2.12, p = 0.149]
-Math construction [F(1,110) = 2.15, p = 0.145]
-Math procedure [F(1,107) = 1.56, p = 0.214]
-Learning and Teaching [F(1,109) = 1.91, p = 0.170]
-Third Grade math concept [F(1,101) = 3.20, p = 0.077]
-Second Grade Arts [F(1,94) = 2.50, p = 0.117]
-Third Grade Arts [F(1,102) < 1]
General Sciences Curriculum Content in (Table 223)
- Science and Scientists [F(1,22) <1]
- Evolution of Astronomy [F(1,22) = 1.31, p = 0.265]
- Transportation [F(1,22) < 1]
- Health [F(1,22) = 3.04, p = 0.095]
- Oil [F(1,24) = 2.03, p = 0.167]
- Solar Energy [F(1,24) = 2.81, p = 0.107]
- Nuclear Energy [F(1,23) < 1]
- Environment and Pollution [F(1,24)= 1.93, p = 0.172]
- Meteorology and Climate Forecast [F(1,24) < 1]
- New Concepts in Second Grade [F(1,18)=4.17, p=0.056]
- New Concepts in Third Grade [F(1,23) < 1]
History Curriculum Content (Table 224)
-Second Grade Art [F(1,58) = 3.45, p = 0.068]
Geography Curriculum Content (Table 225)
-Third Grade Arts [F(1,58) = 1.03, p = 0.314]
Chemistry Curriculum Content (Table 228)
- General [F(1,51) = 2.10, p = 0.153]
- First Grade Units 1 [F(1,49) < 1]
2 [F(1,49) < 1]
3 [F(1,49) < 1]
- Second Grade Units 1 [F(1,47) < 1]
2 [F(1,47) = 1.10, p = 0.299]
3 [F(1,47) < 1]
- Third Grade Units 1 [F(1,48) < 1]
2 [F(1,48) < 1]
3 [F(1,48) < 1]
4 [F(1,48) < 1]

Physics Curriculum Content (Table 229)
- General [F(1,55) = 1.50, p = 0.226]
- First Grade Units 1 [F(1,54) < 1]
  2 [F(1,54) < 1]
  3 [F(1,54) < 1]
- Second Grade Units 1 [F(1,51) < 1]
  2 [F(1,51) < 1]
  3 [F(1,51) < 1]
- Third Grade Units 1 [F(1,51) < 1]
  2 [F(1,51) < 1]
  3 [F(1,51) < 1]

Biology Curriculum Content (Table 230)
-First Grade Units 2 [F(1,43) = 2.76, p = 0.104]
  3 [F(1,43) = 3.57, p = 0.066]
-Second Grade Units 1 [F(1,38) = 3.79, p = 0.059]
  2 [F(1,38) < 1]
  3 [F(1,38) < 1]
-Third Grade Units 3 [F(1,40) = 2.72, p = 0.107]
  4 [F(1,42) = 2.25, p = 0.141]

Table 219: Islamic Education teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Islamic Education	4.12 (52)	2.63 (34)	95.67	1,84	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 220: Arabic Language teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Arabic Language	3.62 (85)	3.11 (28)	14.08	1,111	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 221: English Language teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in English Language	3.23 (63)	2.99 (51)	12.55	1,112	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 222: Mathematics teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.66 (92)	3.40 (20)	2.12	1,110	0.149
Construction	3.31 (92)	2.98 (20)	2.15	1,110	0.145
Procedures	3.51 (89)	3.23 (20)	1.56	1,107	0.214
Learning & Teaching	3.43 (91)	3.13 (20)	1.91	1,109	0.170
1st G	3.52 (92)	3.06 (20)	8.01	1,110	0.006*
2nd G	3.72 (88)	3.05 (18)	20.47	1,104	<0.001*
3rd G	3.70 (84)	3.44 (19)	3.20	1,101	0.077
2nd G, Arts Program	3.38 (78)	3.06 (18)	2.50	1,94	0.117
3rd G, Arts Program	3.20 (85)	3.15 (19)	<1	1,102	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 223: General Science teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.73 (22)	3.18 (8)	4.32	1,28	0.047*
Science & Scientists	3.85 (16)	3.58 (8)	<1	1,22	
Evolution of Astronomy	4.12 (16)	3.79 (8)	1.31	1,22	0.265
Transportation	4.02 (16)	3.71 (8)	<1	1,22	
Health	4.24 (16)	3.79 (8)	3.04	1,22	0.095
Science & world Food Problems	4.30 (16)	3.50 (8)	5.80	1,22	0.025*
Oil	4.25 (18)	3.89 (8)	2.03	1,24	0.167
Solar Energy	4.09 (18)	3.53 (8)	2.81	1,24	0.107
Nuclear Energy	3.79 (17)	3.53 (8)	<1	1,23	
Environment & Pollution	4.08 (18)	3.65 (8)	1.98	1,24	0.172
Meteorology & Forecasting	4.00 (18)	3.78 (8)	<1	1,24	
2nd G, New Concepts	3.96 (12)	3.38 (8)	4.17	1,18	0.056
3rd G, New Concepts	3.96 (17)	3.58 (8)	<1	1,23	

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 224: History teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE: STRONGLY AGREE $\bar{X}$ (n)	ATTITUDE: NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.81 (54)	3.16 (11)	10.26	1,63	0.002*
2nd G	4.20 (50)	3.79 (10)	3.45	1,58	0.068
3rd G	3.88 (51)	3.21 (10)	9.46	1,59	0.003*

KEY: G = Grade
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 225: Geography teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.75 (60)	3.40 (13)	4.05	1,71	0.048*
2nd G	4.00 (50)	3.39 (11)	7.59	1,59	0.008*
3rd G	4.19 (48)	3.97 (12)	1.03	1,58	0.314
Contemporary Problems	4.13 (43)	3.50 (10)	7.11	1,51	0.010*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 226: Human Culture teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.84 (27)	2.98 (6)	7.61	1,31	0.010*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 227: Civic Education teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.89 (30)	3.13 (10)	8.49	1,38	0.006*
1st G, Omani Society	4.54 (30)	4.03 (10)	5.38	1,38	0.026*
2nd G, Arabic Society	4.36 (25)	3.49 (8)	17.12	1,31	<0.001*
3rd G, Muslim Nations	4.47 (25)	3.57 (9)	16.51	1,32	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 228: Chemistry teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.52 (45)	3.27 (8)	2.10	1,51	0.153
1st G, U1	2.59 (43)	2.63 (8)	<1	1,49	
1st G, U2-4	3.51 (43)	3.40 (8)	<1	1,49	
1st G, U7	3.23 (43)	3.38 (8)	<1	1,49	
2nd G, U1	3.74 (41)	3.75 (8)	<1	1,47	
2nd G, U2	3.50 (41)	3.00 (8)	1.10	1,47	0.299
2nd G, U3-6	3.52 (41)	3.53 (8)	<1	1,47	
3rd G, U1-2	3.82 (42)	3.68 (8)	<1	1,48	
3rd G, U3	3.43 (42)	3.49 (8)	<1	1,48	
3rd G, U5-6	3.66 (42)	3.39 (8)	<1	1,48	
3rd G, U7	4.00 (42)	4.02 (8)	<1	1,48	

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 229: Physics teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.66 (46)	3.41 (11)	1.50	1,55	0.226
1st G, U1	3.53 (45)	3.46 (11)	<1	1,54	
1st G, U2	3.76 (45)	3.88 (11)	<1	1,54	
1st G, U3	3.45 (45)	3.27 (11)	<1	1,54	
2nd G, U1	3.54 (42)	3.56 (11)	<1	1,51	
2nd G, U2	3.42 (42)	3.36 (11)	<1	1,51	
2nd G, U3	3.54 (42)	3.45 (11)	<1	1,51	
3rd G, U1	3.80 (42)	3.64 (11)	<1	1,51	
3rd G, U2	3.50 (42)	3.53 (11)	<1	1,51	
3rd G, U3	3.43 (42)	3.42 (11)	<1	1,51	

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 230: Biology teacher response to Curriculum Content items as a function of Factor III: the importance of a student centered curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, U1	3.87 (37)	3.26 (12)	9.70	1,47	0.003*
1st G, U2	3.75 (34)	3.35 (11)	2.76	1,43	0.104
1st G, U3	3.96 (34)	3.39 (11)	3.57	1,43	0.066
1st G, U4	3.98 (33)	3.39 (11)	5.54	1,42	0.023*
1st G, U5	3.96 (33)	3.40 (11)	4.29	1,42	0.044*
2nd G, U1	4.22 (32)	3.73 (8)	3.79	1,38	0.059
2nd G, U2	4.06 (32)	3.84 (8)	<1	1,38	
2nd G, U3	4.23 (32)	3.98 (8)	<1	1,38	
3rd G, U1	4.30 (30)	3.82 (9)	4.75	1,37	0.036*
3rd G, U2	4.35 (30)	3.79 (9)	6.29	1,37	0.017*
3rd G, U3	4.09 (31)	3.72 (11)	2.72	1,40	0.107
3rd G, U4	3.84 (33)	3.50 (11)	2.25	1,42	0.141

KEY: G = Grade; U = Unit
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

D. Factor IV: The importance of integrating the students' social and cultural heritage into the curriculum

1. Process of Curriculum Development

Statistically significant differences in the responses given to the process of curriculum development items as a function of attitude toward Factor IV were found among teachers of the arts [$F(1,209) = 15.65$, $p < 0.001$], teachers of the sciences [$F(1,302) = 5.34$, $p = 0.022$], and supervisors of the shared subject matters in Arabic and English Languages [$F(1,33) = 19.76$, $p < 0.001$] (Table 216). Among these groups, those who rated the integration of the student's social and cultural heritage into the curriculum as very important also agreed most strongly with the process of curriculum development items.

Among teachers of the shared subject matters [$F(1,293) = 3.03$, $p = 0.083$], supervisors of the arts [$F(1,21) = 2.04$, $p = 0.168$] and supervisors of the sciences [$F(1,26) < 1$], no statistically significant differences were found between the subjects' attitudes toward the importance of integrating the student's social and cultural heritage into the curriculum and their satisfaction with the process of curriculum development in Oman (Table 231). Supervisors of Islamic Education were not distributed across two or three levels of Factor IV in sufficient number to permit analysis.

Table 231: Teacher and supervisor response to Curriculum Development items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	3.09 (177)	2.94 (118)		3.03	1,293	0.083
Arts Subjects	3.08 (166)	2.57 (45)		15.65	1,209	<0.001*
Science Subjects	3.09 (192)	2.89 (112)		5.34	1,302	0.022*
SUPERVISORS:						
Shared Subject Matters	3.48 (19)	2.57 (16)	---- (0)	19.76	1,33	<0.001*
Islamic Education	---- (0)	2.71 (2)	2.39 (10)			
Arts Subjects	2.92 (16)	2.63 (7)	---- (0)	2.04	1,21	0.168
Science Subjects	3.18 (17)	3.01 (11)	---- (0)	<1	1,26	

^Only supervisors were assessed at three levels of this variable.
Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

2. Curriculum Content

Tables 232 through 243 give the mean responses given to specific curriculum content questionnaire items in each of the twelve subject matter areas by teachers that rated Factor IV as either highly important or moderately important. Also given in these tables are the results from the one-way ANOVA comparing these means.

Listed below are those analyses that produced significant differences. In each case, the significant

difference indicated that the subjects' attitudes toward Factor IV predicted their response to the curriculum content being assessed. And in all of these instances, subjects that rated Factor IV as very important also gave the greatest level of agreement with the curriculum content, suggesting that the curriculum content under analysis is appropriate to an educational system that values the integration of the students' social and cultural heritage into the curriculum.

Statistically significant differences in the responses given to the following curriculum content items were found between teachers that rated the importance of integrating the students' social and cultural heritages into the curriculum as either highly important or important. In all cases, those teachers that gave the greatest rating to factor IV also gave the greatest level of satisfaction with the Curriculum Content. No statistics are reported in the lists given below; instead, the reader should refer to the tables given in parentheses for the F values as well as the mean responses by teachers that found the Factor either highly important or moderately important.

Islamic Education Curriculum Content [$F(1,84) = 49.00$, $p < 0.001$] (Table 232)

Arabic Language Curriculum Content [$F(1,111) = 14.47$, $p < 0.001$] (Table 233)

Mathematics Curriculum Content in (Table 235)

- Math construction [$F(1,110) = 4.83$, $p = 0.030$]
- First Grade concept [$F(1,110) = 6.07$, $p = 0.015$]
- Second Grade concept [$F(1,104) = 8.33$, $p = 0.005$]
- Third Grade concept [$F(1, 101) = 12.45$, $p < 0.001$]

-Third Grade Art [F(1,102) = 5.28, p = 0.024]
General Sciences Curriculum Content in (Table 236)
- General [F(1,28) = 6.90, p = 0.014]
- Transportation [F(1,22) = 5.72, p = 0.026]
- Health [F(1,22) = 5.02, p = 0.036]
- Science and the World Food Problems [F(1,22) = 7.97, p = 0.010]
- Oil [F(1,24) = 10.89, p = 0.003]
- Solar Energy [F(1,24) = 11.24, p = 0.003]
- Nuclear Energy [F(1,23) = 10.25, p = 0.004]
- Environment and Pollution [F(1,24)=7.39, p = 0.012]
History Curriculum Content (Table 237)
- General [F(1,63) = 24.35, p < 0.001]
- Second Grade [F(1,58) = 18.73, p < 0.001]
- Third Grade [F(1,59) = 22.13, p < 0.001]
Geography Curriculum Content in (Table 238)
-General [F(1,71) = 5.68, p = 0.020]
-Second Grade Art [F(1,59) = 4.13, p = 0.047]
Human Cultures Curriculum Content [F(1,31) = 5.99, p = 0.020] (Table 239)
Civic Education Curriculum Content (Table 240)
- General [F(1,38) = 16.12, p < 0.001]
- Omani Society [F(1,38) = 32.74, p < 0.001]
- Arabic Society [F(1,31) = 10.05, p = 0.003]
- Muslim Nations [F(1,32) = 23.85, p < 0.001]
Chemistry Curriculum Content in (Table 241)
-Second Grade Unit 2 [F(1,47) = 7.53, p = 0.009]
Physics Curriculum Content in (Table 242)
-First Grade Units 2 [F(1,54) = 4.29, p 0.043]
3 [F(1,54) = 6.34, p = 0.014]
-Third Grade Units 1 [F(1,51) = 5.26, p = 0.026]
2 [F(1,51) = 6.51, p = 0.014
Biology Curriculum Content in (Table 243)
-First Grade Unit 1 [F(1,50) = 4.12, p = 0.048]

No statistically significant differences as a function of the teachers' attitudes toward Factor IV were found in the analyses of the following curriculum content items.

English Curriculum Content [F(1,114) < 1] (Table 234)
Mathematics Curriculum Content in (Table 235)
-General [F(1,110) = 3.21, p = 0.076]
-Math procedure [F(1,107) = 1.32, p = 0.254]
-Learning and Teaching [F(1,109) = 1.13, p = 0.290]
-Second Grade Art [F(1,94) < 1]
General Sciences Curriculum Content in (Table 236)
- Science and Scientists [F(1,22) = 1.03, p = 0.322]

- Evolution of Astronomy [F(1,22) = 3.24, p = 0.086]
- Meteorology and Climate Forecast [F(1,24) = 3.50, p = 0.074]
- New Concepts in Second Grade [F(1,18) = 1.20, p = 0.257]
- New Concepts in Third Grade [F(1,23) < 1]

Geography Curriculum Content in (Table 238)
-Third Grade Arts [F(1,58) = 2.81, p = 0.099]
-Contemporary Problems [F(1,51) = 3.21, p = 0.079]

Chemistry Curriculum Content (Table 241)
-General [F(1,51) < 1]
-First Grade Units 1 [F(1,49) < 1]
2-4 [F(1,49) = 1.99, p = 0.164]
7 [F(1,49) = 3.47, p = 0.069]
-Second Grade Units 1 [F(1,47) = 1.84, p = 0.181]
3-6 [F(1,47) = 1.76, p = 0.191]
-Third Grade Units 1-2 [F(1,48) = 2.17, p = 0.147]
3 [F(1,48) < 1]
5-6 [F(1,48) = 2.82, p = 0.100]
7 [F(1,48) < 1]

Physics Curriculum Content (Table 242)
-General [F(1,55) = 1.92, p = 0.172]
-First Grade Unit 1 [F(1,54) = 1.44, p = 0.235]
-Second Grade Units 1 [F(1,51) = 1.27, p = 0.266]
2 [F(1,51) = 2.80, p = 0.100]
3 [F(1,51) = 2.60, p = 0.113]
-Third Grade Unit 3 [F(1,51) = 1.24, p = 0.271]

Biology Curriculum Content (Table 243)
-First Grade Units 2 [F(1,46) = 1.00]
3 [F(1,46) = 1.25, p = 0.270]
4 [F(1,45) = 2.43, p = 0.126]
5 [F(1,45) = 3.42, p = 0.071]
-Second Grade Units 1 [F(1,41) < 1]
2 [F(1,41) < 1]
3 [F(1,41) < 1]
-Third Grade Units 1 [F(1,40) < 1]
2 [F(1,40) < 1]
3 [F(1,43) < 1]
4 [F(1,45) = 1.32, p = 0.256]

Table 232: Islamic Education teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Islamic Education	4.14 (43)	2.92 (43)	49.00	1,84	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 233: Arabic Language teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Arabic Language	3.64 (35)	3.16 (78)	14.47	1,111	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 234: English Language teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in English Language	3.15 (54)	3.11 (62)	<1	1,114	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 235: Mathematics teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.71 (71)	3.45 (41)	3.21	1,110	0.076
Construction	3.39 (71)	3.00 (41)	4.83	1,110	0.030*
Procedures	3.54 (69)	3.33 (40)	1.31	1,107	0.254
Learning & Teaching	3.44 (70)	3.26 (41)	1.13	1,109	0.290
1st G	3.55 (71)	3.23 (41)	6.07	1,110	0.015*
2nd G	3.73 (67)	3.38 (39)	8.33	1,104	0.005*
3rd G	3.79 (65)	3.41 (38)	12.45	1,101	<0.001*
2nd G, Arts Program	3.37 (59)	3.24 (37)	<1	1,94	
3rd G, Arts Program	3.31 (65)	2.98 (39)	5.28	1,102	0.024*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 236: General Science teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.86 (16)	3.27 (14)	6.90	1,28	0.014*
Science & Scientists	3.90 (12)	3.61 (12)	1.03	1,22	0.322
Evolution of Astronomy	4.24 (12)	3.78 (12)	3.24	1,22	0.086
Transportation	4.28 (12)	3.56 (12)	5.72	1,22	0.026*
Health	4.35 (12)	3.83 (12)	5.02	1,22	0.036*
Science & world Food Problems	4.46 (12)	3.61 (12)	7.97	1,22	0.010*
Oil	4.47 (13)	3.81 (13)	10.89	1,24	0.003*
Solar Energy	4.37 (13)	3.47 (13)	11.24	1,24	0.003*
Nuclear Energy	4.21 (13)	3.17 (12)	10.25	1,23	0.004*
Environment & Pollution	4.30 (13)	3.60 (13)	7.39	1,24	0.012*
Meteorology & Forecasting	4.22 (13)	3.64 (13)	3.50	1,24	0.074
2nd G, New Concepts	3.91 (9)	3.58 (11)	1.20	1,18	0.287
3rd G, New Concepts	3.92 (13)	3.75 (12)	<1	1,23	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 237: History teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.91 (47)	3.15 (18)	24.35	1,63	<0.001*
2nd G	4.32 (44)	3.61 (16)	18.73	1,58	<0.001*
3rd G	3.98 (44)	3.20 (17)	22.13	1,59	<0.001*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 238: Geography teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.76 (60)	3.35 (13)	5.68	1,71	0.020*
2nd G	3.97 (51)	3.48 (10)	4.13	1,59	0.047*
3rd G	4.21 (51)	3.81 (9)	2.81	1,58	0.099
Contemporary Problems	4.07 (46)	3.57 (7)	3.21	1,51	0.079

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 239: Human Culture teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.84 (26)	3.11 (7)	5.99	1,31	0.020*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 240: Civic Education teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.89 (33)	2.79 (7)	16.12	1,38	<0.001*
1st G, Omani Society	4.61 (33)	3.49 (7)	32.74	1,38	<0.001*
2nd G, Arabic Society	4.28 (28)	3.42 (5)	10.05	1,31	0.003*
3rd G, Muslim Nations	4.46 (27)	3.36 (7)	23.85	1,32	<0.001*

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 241: Chemistry teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.51 (28)	3.44 (25)	<1	1,51	
1st G, U1	2.63 (26)	2.57 (25)	<1	1,49	
1st G, U2-4	3.65 (26)	3.33 (25)	1.99	1,49	0.164
1st G, U7	3.42 (26)	3.08 (25)	3.47	1,49	0.069
2nd G, U1	3.92 (25)	3.56 (24)	1.84	1,47	0.181
2nd G, U2	3.87 (25)	2.95 (24)	7.53	1,47	0.009*
2nd G, U3-6	3.64 (25)	3.40 (24)	1.76	1,47	0.191
3rd G, U1-2	3.92 (26)	3.66 (24)	2.17	1,48	0.147
3rd G, U3	3.49 (26)	3.38 (24)	<1	1,48	
3rd G, U5-6	3.80 (26)	3.43 (24)	2.82	1,48	0.100
3rd G, U7	4.05 (26)	3.95 (24)	<1	1,48	

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 242: Physics teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.71 (32)	3.48 (25)	1.92	1,55	0.172
1st G, U1	3.62 (31)	3.39 (25)	1.44	1,54	0.235
1st G, U2	3.96 (31)	3.56 (25)	4.29	1,54	0.043*
1st G, U3	3.65 (31)	3.13 (25)	6.34	1,54	0.015*
2nd G, U1	3.64 (29)	3.42 (24)	1.27	1,51	0.266
2nd G, U2	3.57 (29)	3.22 (24)	2.80	1,51	0.100
2nd G, U3	3.67 (29)	3.35 (24)	2.60	1,51	0.113
3rd G, U1	3.95 (29)	3.54 (24)	5.26	1,51	0.026*
3rd G, U2	3.73 (29)	3.24 (24)	6.51	1,51	0.014*
3rd G, U3	3.53 (29)	3.30 (24)	1.24	1,51	0.271

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 243: Biology teacher response to Curriculum Content items as a function of Factor IV: the importance of emphasizing the student's social and cultural heritage in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, U1	3.83 (43)	3.37 (9)	4.12	1,50	0.048*
1st G, U2	3.70 (39)	3.44 (9)	1.00	1,46	
1st G, U3	3.90 (39)	3.54 (9)	1.25	1,46	0.270
1st G, U4	3.91 (38)	3.50 (9)	2.43	1,45	0.126
1st G, U5	3.91 (38)	3.38 (9)	3.42	1,45	0.071
2nd G, U1	4.10 (38)	4.05 (5)	<1	1,41	
2nd G, U2	3.99 (38)	4.10 (5)	<1	1,41	
2nd G, U3	4.18 (38)	4.21 (5)	<1	1,41	
3rd G, U1	4.24 (35)	4.07 (7)	<1	1,40	
3rd G, U2	4.26 (35)	4.04 (7)	<1	1,40	
3rd G, U3	4.06 (36)	3.91 (9)	<1	1,43	
3rd G, U4	3.83 (38)	3.55 (9)	1.32	1,45	0.256

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

E. Factor V: The importance of developing the students' thinking abilities

1. Process of Curriculum Development

Statistically significant differences in the responses given to process of curriculum development items as a function of attitude toward Factor V were found among

teachers of the shared subject matters [$F(1,255) = 18.37$, $p < 0.001$], teachers of the arts [$F(1,203) = 22.10$, $p < 0.001$], and supervisors of the shared subject matters in Arabic and English Languages [$F(2,31) = 15.67$, $p < 0.001$] (Table 244). Among these groups, those who rated developing the students' thinking abilities as very important also agreed most strongly with the process of curriculum development items.

Among teachers of the sciences [$F(1,286) = 2.99$, $p = 0.085$], supervisors of the arts [$F(1,21) < 1$] and supervisors of the sciences [$F(1,25) < 1$], no statistically significant differences were found between the subjects' attitudes toward the development the students' thinking abilities and their satisfaction with the process of curriculum development in Oman (Table 244). Supervisors of Islamic Education were not distributed across two or three levels of Factor V in sufficient number to permit analysis.

2. Curriculum Content

Tables 245 through 256 give the mean responses given to specific curriculum content questionnaire items in each of the twelve subject matter areas by teachers that rated Factor V as either highly important or moderately important. Also given in these tables are the results from the one-way ANOVA comparing the mean responses to each group of curriculum content items by teachers that strongly or moderately supported Factor V.

Table 244: Teacher and supervisor response to Curriculum Development items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE					
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	STRONGLY DISAGREE^ $\bar{X}$ (n)	F	df	p
TEACHERS:						
Shared Subject Matters	3.13 (181)	2.71 (76)		18.37	1,255	<0.001*
Arts Subjects	3.12 (143)	2.59 (62)		22.10	1,203	<0.001*
Science Subjects	3.05 (222)	2.87 (66)		2.99	1,286	0.085
SUPERVISORS:						
Shared Subject Matters	3.49 (20)	2.53 (10)	2.20 (4)	15.67	2,31	<0.001**
Islamic Education	---- (0)	2.53 (3)	2.42 (9)			
Arts Subjects	2.86 (15)	2.78 (8)	---- (0)	<1	1,21	
Science Subjects	3.12 (17)	2.99 (10)	---- (0)	<1	1,25	

^Only supervisors were assessed at three levels of this variable.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

The Scheffe pairwise comparison of the group means showed: ** = strongly agree to differ significantly from neutral.

Listed below are those analyses that produced significant differences. In each case the significant difference indicated that the subjects' attitudes toward Factor V predicted their response to the curriculum content being assessed. And in all of these instances, subjects that rated Factor V as very important also gave the greatest level of agreement with the curriculum content, suggesting

that the curriculum content under analysis is appropriate to an educational system that values the importance of developing the students' thinking abilities.

Statistically significant differences in the responses given to the following curriculum content items were found between teachers that rated the importance of developing the students' thinking abilities as very important or important. In all cases, those teachers that gave the greatest rating to factor V also gave the greatest level of satisfaction with the curriculum content. No statistics are reported in the lists given below; instead, the reader should refer to the tables given in parentheses for the F values as well as the mean responses by teachers that found the Factor either highly important or moderately important.

Islamic Education Curriculum Content [$F(1,78) = 112.20$, $p < 0.001$] (Table 245)

Arabic Language Curriculum Content [$F(1,105) = 18.43$, $p < 0.001$] (Table 246)

English Language Curriculum Content [$F(1,98) = 7.01$, $p = 0.009$] (Table 247)

Mathematics Curriculum Content in (Table 248)
- -General [$F(1,105) = 4.36$, $p = 0.039$]
- -Third Grade concept [$F(1,96) = 4.37$, $p = 0.039$]

General Sciences Curriculum Content in (Table 249)
- - General [$F(1,27) = 9.12$, $p = 0.006$]
- - Science and The World Food Problem [$F(1,21) = 8.82$, $p = 0.007$]

History Curriculum Content in (Table 250)
- - General [$F(1,63) = 5.56$, $p = 0.022$]
- - Second Grade [$F(1,58) = 4.17$, $p = 0.046$]

Geography Curriculum Content in (Table 251)
- -Second Grade Art [$F(1,59) = 12.44$, $p < 0.001$]

Human Cultures Curriculum Content [$F(1,30) = 9.97$, $p = 0.004$] (Table 252)

Physics Curriculum Content in (Table 2550)
- -General [$F(1,54) = 15.96$, $p < 0.001$]
- -First Grade Unit 3 [$F(1,53) = 6.51$, $p = 0.014$]

-Third Grade Units 1 [F(1,50) = 4.99, p = 0.030]
2 [F(1,50) = 8.84, p = 0.005]
3 [F(1,50) = 11.57, p = 0.001]

Biology Curriculum Content (Table 256)
-First Grade Units 1 [F(1,47) = 4.37, p = 0.042]
4 [F(1,42) = 5.35, p = 0.026]
5 [F(1,42) = 7.75, p = 0.008]
-Third Grade Unit 2 [F(1,37) = 4.33, p = 0.044]

No statistically significant differences as a function of the teachers' attitudes toward Factor V were found in the analyses of the following curriculum content items.

Mathematics Curriculum Content (Table 248)
-Math construction [F(1,105) = 3.41, p = 0.068]
-Math procedure [F(1,103) = 1.33, p = 0.251]
-Learning and Teaching [F(1,105) < 1]
-First Grade math concept [F(1,105) = 1.06, p = 0.306]
-Second Grade math concept [F(1,99) = 3.69, p = 0.058]
-Second Grade Art [F(1,89) < 1]
-Third Grade Arts [F(1,97) < 1]

General Sciences Curriculum Content in (Table 249)
- Science and Scientists [F(1,21) = 1.66, p = 0.212]
- Evolution of Astronomy [F(1,21) = 3.41, p = 0.079]
- Transportation [F(1,21) = 2.16, p = 0.156]
- Health [F(1,21) = 4.17, p = 0.054]
- Oil [F(1,23) < 1]
- Solar Energy [F(1,23) = 1.65, p = 0.212]
- Nuclear Energy [F(1,222) = 1.52, p = 0.231]
- Environment and Pollution [F(1,23)=1.16, p = 0.293]
- Meteorology and Climate Forecast [F(1,23) < 1]
- New Concepts in Second Grade [F(1,17)=1.96, p=0.179]
- New Concepts in Third Grade [F(1,22)=1.31, p=0.264]

History Curriculum Content (Table 250)
-Third Grade [F(1,59) = 2.10, p = 0.153]

Geography Curriculum Content (Table 251)
-General [F(1,71) = 3.49, p = 0.066]
-Third Grade Arts [F(1,58) < 1]
-Contemporary Problems [F(1,51) = 1.66, p = 0.203]

Civic Education Curriculum Content (Table 253)
- General [F(1,37) < 1]
- Omani Society [F(1,37) < 1]
- Arabic Society [F(1,30) = 2.63, p = 0.115]
- Muslim Nations [F(1,31) < 1]

Chemistry Curriculum Content (Table 254)
-General [F(1,49) < 1]
-First Grade Units 1 [F(1,47) < 1]
2-4 [F(1,47) < 1]
7 [F(1,47) < 1]
-Second Grade Units 1 [F(1,45) = 2.76, p = 0.104]
2 [F(1,45) < 1]
3-6 [F(1,45) < 1]
-Third Grade Units 1-2 [F(1,46) = 1.34, p = 0.253]
3 [F(1,46) < 1]
5-6 [F(1,46) = 3.90, p = 0.054]
7 [F(1,46) = 1.69, p = 0.200]

Physics Curriculum Content (Table 255)
-First Grade Units 1 [F(1,53) < 1]
2 [F(1,53) = 2.57, p = 0.115]
-Second Grade Units 1 [F(1,50) < 1]
2 [F(1,50) = 2.28, p = 0.138]
3 [F(1,50) = 1.52, p = 0.223]

Biology Curriculum Content (Table 256)
-First Grade Units 2 [F(1,43) = 1.06, p = 0.308]
3 [F(1,43) = 1.15, p = 0.290]
-Second Grade Units 1 [F(1,38) = 1.42, p = 0.241]
2 [F(1,38) < 1]
3 [F(1,38) < 1]
-Third Grade Units 1 [F(1,37) = 3.54, p = 0.068]
3 [F(1,39) < 1]
4 [F(1,41) = 2.58, p = 0.116]

Table 245: Islamic Education teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Islamic Education	4.13 (50)	2.57 (30)	112.20	1,78	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 246: Arabic Language teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in Arabic Language	3.64 (80)	3.04 (27)	18.43	1,105	<0.001*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 247: English Language teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts taught in English Language	3.17 (48)	2.98 (52)	7.01	1,98	0.009*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 248: Mathematics teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.68 (80)	3.34 (27)	4.36	1,105	0.039*
Construction	3.30 (80)	2.94 (27)	3.41	1,105	0.068
Procedures	3.51 (78)	3.28 (27)	1.33	1,103	0.251
Learning & Teaching	3.37 (80)	3.28 (27)	<1	1,105	
1st G	3.47 (80)	3.32 (27)	1.06	1,105	0.306
2nd G	3.68 (75)	3.41 (26)	3.69	1,99	0.058
3rd G	3.76 (71)	3.52 (27)	4.37	1,96	0.039*
2nd G, Arts Program	3.36 (66)	3.23 (25)	<1	1,89	
3rd G, Arts Program	3.20 (73)	3.18 (26)	<1	1,97	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 249: General Science teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.80 (21)	3.04 (8)	9.12	1,27	0.006*
Science & Scientists	3.94 (16)	3.59 (7)	1.66	1,21	0.212
Evolution of Astronomy	4.20 (16)	3.67 (7)	3.41	1,21	0.079
Transportation	4.10 (16)	3.57 (7)	2.16	1,21	0.156
Health	4.25 (16)	3.70 (7)	4.17	1,21	0.054
Science & world Food Problems	4.38 (16)	3.45 (7)	8.82	1,21	0.007*
Oil	4.23 (18)	4.07 (7)	<1	1,23	
Solar Energy	4.09 (18)	3.64 (7)	1.65	1,23	0.212
Nuclear Energy	3.91 (17)	3.39 (7)	1.52	1,22	0.231
Environment & Pollution	4.10 (18)	3.77 (7)	1.16	1,23	0.292
Meteorology & Forecasting	4.04 (18)	3.76 (7)	<1	1,23	
2nd G, New Concepts	3.92 (13)	3.50 (6)	1.96	1,17	0.179
3rd G, New Concepts	4.02 (18)	3.50 (6)	1.31	1,22	0.264

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 250: History teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.83 (43)	3.44 (22)	5.56	1,63	0.022*
2nd G	4.25 (40)	3.90 (20)	4.17	1,58	0.046*
3rd G	3.86 (40)	3.60 (21)	2.10	1,59	0.153

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 251: Geography teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.79 (43)	3.54 (30)	3.49	1,71	0.066
2nd G	4.13 (36)	3.54 (25)	12.44	1,59	<0.001*
3rd G	4.21 (33)	4.07 (27)	<1	1,58	
Contemporary Problems	4.11 (31)	3.86 (22)	1.66	1,51	0.203

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 252: Human Culture teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In Human Culture	3.84 (27)	2.98 (6)	7.61	1,31	0.010*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 253: Civic Education teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.72 (32)	3.52 (7)	<1	1,37	
1st G, Omani Society	4.45 (32)	4.26 (7)	<1	1,37	
2nd G, Arabic Society	4.26 (26)	3.81 (6)	2.63	1,30	0.115
3rd G, Muslim Nations	4.31 (26)	4.11 (7)	<1	1,31	

KEY: G = Grade

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 254: Chemistry teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.49 (41)	3.44 (10)	<1	1,49	
1st G, U1	2.58 (39)	2.53 (10)	<1	1,47	
1st G, U2-4	3.47 (39)	3.70 (10)	<1	1,47	
1st G, U7	3.29 (39)	3.20 (10)	<1	1,47	
2nd G, U1	3.86 (37)	3.33 (10)	2.76	1,45	0.104
2nd G, U2	3.54 (37)	3.30 (10)	<1	1,45	
2nd G, U3-6	3.52 (37)	3.63 (10)	<1	1,45	
3rd G, U1-2	3.88 (38)	3.67 (10)	1.34	1,46	0.253
3rd G, U3	3.50 (38)	3.33 (10)	<1	1,46	
3rd G, U5-6	3.73 (38)	3.20 (10)	3.90	1,46	0.054
3rd G, U7	4.09 (38)	3.82 (10)	1.69	1,46	0.200

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

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Table 253: Physics teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
General	3.81 (38)	3.18 (18)	15.96	1,54	<0.001*
1st G, U1	3.55 (37)	3.52 (18)	<1	1,53	
1st G, U2	3.89 (37)	3.56 (18)	2.57	1,53	0.115
1st G, U3	3.59 (37)	3.04 (18)	6.50	1,53	0.014*
2nd G, U1	3.57 (35)	3.50 (17)	<1	1,50	
2nd G, U2	3.53 (35)	3.18 (17)	2.28	1,50	0.138
2nd G, U3	3.62 (35)	3.35 (17)	1.52	1,50	0.223
3rd G, U1	3.92 (35)	3.50 (17)	4.99	1,50	0.030*
3rd G, U2	3.72 (35)	3.12 (17)	8.84	1,50	0.005*
3rd G, U3	3.64 (35)	2.96 (17)	11.57	1,50	0.001*

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 256: Biology teacher response to Curriculum Content items as a function of Factor V: the importance of emphasizing thinking abilities in the curriculum.

	ATTITUDE				
	STRONGLY AGREE $\bar{X}$ (n)	NEUTRAL $\bar{X}$ (n)	F	df	p
Concepts Taught In:					
1st G, U1	3.81 (40)	3.33 (9)	4.37	1,47	0.042*
1st G, U2	3.70 (37)	3.42 (8)	1.06	1,43	0.308
1st G, U3	3.89 (37)	3.51 (8)	1.15	1,43	0.290
1st G, U4	3.95 (36)	3.30 (8)	5.35	1,42	0.026*
1st G, U5	3.96 (36)	3.15 (8)	7.75	1,42	0.008*
2nd G, U1	4.17 (34)	3.82 (6)	1.42	1,38	0.241
2nd G, U2	4.05 (34)	3.79 (6)	<1	1,38	
2nd G, U3	4.21 (34)	3.98 (6)	<1	1,38	
3rd G, U1	4.27 (32)	3.81 (7)	3.54	1,37	0.068
3rd G, U2	4.31 (32)	3.80 (7)	4.33	1,37	0.044*
3rd G, U3	4.03 (33)	3.78 (8)	<1	1,39	
3rd G, U4	3.83 (35)	3.43 (8)	2.58	1,41	0.116

KEY: G = Grade; U = Unit

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

VIII. A COMPARISON OF THE TEACHERS, SUPERVISORS, AND ADMINISTRATORS RESPONSES TO THEORY, PROCESS AND PRACTICE, RESOURCES, AND PROCESS OF CURRICULUM DEVELOPMENT QUESTIONNAIRE ITEMS: ONE-WAY ANOVA

The responses given to each section of the questionnaire by teachers and supervisors from each area of instruction and administrators were compared by one-way ANOVA. The results are reported below by questionnaire section.

A. Theory

The mean responses and the result of the statistical comparison of the mean responses given to the Omani Educational objective items by teachers and supervisors from each area of instruction and administrators is reported in Table 257. A statistically significant difference between these educator groups was found [$F(7,1006) = 28.37$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the groups means found the greatest difference to fall between Islamic Education supervisors [mean response (+/- s.d.) = 1.88 (0.48)] and all other groups [mean responses (+/- s.d.) for teachers and supervisors of the shared subject matter were 3.68 (0.81) and 3.55 (0.77) respectively; for teachers and supervisors of the arts were 4.14 (0.51) and 3.90 (0.51) respectively; for teachers and supervisors of the sciences were 3.91 (0.57) and 3.86 (0.58) respectively, and for administrators was 4.09 (0.47)]. In addition, the Scheffe found the mean responses to Omani Educational Objective items by teachers and supervisors in the shared subject matters [mean responses (+/- s.d.) were 3.68 (0.81) and 3.55 (0.77) respectively] to differ significantly from the mean responses given by administrators [mean response (+/- s.d.) = 4.09 (0.47)] and teachers of the arts [mean response (+/- s.d.) = 4.14 (0.51)]. Finally, the Scheffe also showed that the mean responses of teachers of the sciences were slightly but significantly greater than the mean responses of

teachers of the shared subject matters, and that the mean responses of teachers of the arts, was slightly but significantly greater than the mean responses of teachers of the sciences.

Overall, supervisors of Islamic Education [mean response (+/- s.d.) = 1.88 (0.48) and teachers and supervisors of the shared subject matter areas [mean responses (+/- s.d.) were 3.68 (0.80) and 3.55 (0.78) respectively gave the least positive responses to the Omani Educational objective items, and in the case of the supervisors of Islamic Education, they actual disagreed with appropriateness and usefulness of the current Omani Educational objectives. Administrators [mean response (+/- s.d.) = 4.09 (0.47) and teachers of the arts and sciences [mean responses (+/- s.d.) were 4.14 (0.51) and 3.91 (0.57) respectively] gave the most positive response.

B. Process and Practice

The mean responses and the result from statistical comparison of the mean responses given to the method of instruction items by teachers and supervisors from each area of instruction and administrators are reported in Table 257. A statistically significant difference between these educator groups was found [$F(7,998) = 6.86$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the groups means found the significant ANOVA was explained by a single

statistical difference between the responses given by Islamic Education supervisors [mean response (+/- s.d.) = 2.29 (0.53)] and all other educator groups [mean responses (+/- s.d.) for teachers and supervisors of the shared subject matter were 3.42 (0.75) and 3.38 (0.74) respectively; for teachers and supervisors of the arts were 3.58 (0.75) and 3.36 (0.61) respectively; for teachers and supervisors of the sciences were 3.48 (0.65) and 3.48 (0.72) respectively, and for administrators was 3.67 (0.59)].

The mean responses and the result from statistical comparison of the mean responses given to the student assessment technique items by teachers and supervisors from each area of instruction and administrators are reported in Table 257. A statistically significant difference between these educator groups was found [$F(7,998) = 19.21$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the groups means found the greatest statistical difference between the responses given by Islamic Education supervisors [mean response (+/- s.d.) = 2.14 (0.50)] and all other educator groups [mean responses (+/- s.d.) for teachers and supervisors of the shared subject matter were 3.55 (0.70) and 3.41 (0.66) respectively; for teachers and supervisors of the arts were 3.88 (0.52) and 3.47 (0.61) respectively; for teachers and supervisors of the sciences were 3.71 (0.49) and 3.59 (0.56) respectively, and for administrators was 3.67 (0.50)]. In addition, the Scheffe showed that

teachers of the arts [mean response (+/- s.d.) = 3.88 (0.52)] differed significantly from teachers and supervisors of the shared subject matter ares [mean response (+/- s.d.) were 3.55 (0.070) and 3.41 (0.66) respectively].

C. Resources

The mean responses and the result from statistical comparison of the mean responses given to staff items by teachers and supervisors from each area of instruction and administrators is reported in Table 257. A statistically significant difference between these educator groups was found [$F(7,991) = 5.38$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the groups' means found the significant differences identified by the ANOVA to fall between the responses given by Islamic Education supervisors [mean response (+/- s.d.) = 2.38 (0.54)] and the responses given by all other educator groups [mean responses (+/- s.d.) for teachers and supervisors of the shared subject matter were 3.32 (0.70) and 3.44 (0.68) respectively; for teachers of the arts were 3.39 (0.84); for teachers of the sciences was 3.22 (0.71), and for administrators was 3.48 (0.61)] except supervisors of the arts [mean response (+/- s.d.) = 2.97 (0.61) and supervisors of the sciences [mean response (+/- s.d.) = 3.31 (0.75)].

The mean responses and the result from statistical comparison of the mean responses given to facility,

equipment, and material items by teachers and supervisors from each area of instruction and administrators are reported in Table 257. A statistically significant difference in the responses given to facility, equipment, and material items was found between these educator groups [$F(7,991) = 3.91$, $p < 0.001$]. However, the Scheffe post-hoc pairwise comparison of the group means found no two groups to differ significantly. The mean responses (+/- s.d.) to this portion of the questionnaire ranged from 2.64 (0.58) given by supervisors of Islamic Education to 3.37 (0.73) given by supervisors of the shared subject matters.

The mean responses and the result from statistical comparison of the mean responses given to textbook items by teachers and supervisors from each area of instruction are reported in Table 257. A statistically significant difference between these educator groups was found [$F(6,911) = 12.18$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the groups means found significant differences between the responses given by Islamic Education supervisors [mean response (+/- s.d.) = 2.03 (0.43)] and the responses given by all other educator groups [mean responses (+/- s.d.) for teachers and supervisors of the shared subject matter were 3.45 (0.75) and 3.57 (0.48) respectively; for teachers and supervisors of the arts were 3.70 (0.70) and 3.44 (0.67) respectively; and for teachers and supervisors of the sciences were 3.49 (0.66) and 3.57 (0.48)

Table 257: A comparison of teacher, supervisor, and administrator response to Theory, Process and Practice, Resources, and Process of Curriculum Development Items.

	TEACHERS			SUPERVISORS				ADMIN			
	SHAR $\bar{X}$ (n)	ARTS $\bar{X}$ (n)	SCI $\bar{X}$ (n)	SHAR $\bar{X}$ (n)	ISLA $\bar{X}$ (n)	ARTS $\bar{X}$ (n)	SCI $\bar{X}$ (n)	$\bar{X}$ (n)	F	df	p
THEORY											
Educational Objectives	3.68 (321)	4.14 (211)	3.91 (308)	3.55 (35)	1.88 (12)	3.90 (24)	3.86 (28)	4.09 (75)	28.37	7,1006	<0.001* **, ***, ****
PROCESS AND PRACTICE											
Methods of Instruction	3.42 (310)	3.58 (211)	3.48 (302)	3.38 (34)	2.29 (12)	3.36 (24)	3.48 (28)	3.67 (75)	6.86	7,998	<0.001*
Student Assessment	3.55 (320)	3.88 (211)	3.71 (302)	3.41 (34)	2.14 (12)	3.47 (24)	3.59 (28)	3.67 (75)	19.21	7,998	<0.001* *****, ******
RESOURCES											
Staff	3.32 (313)	3.39 (210)	3.22 (302)	3.44 (35)	2.38 (12)	2.97 (24)	3.31 (28)	3.48 (75)	5.38	7,991	<0.001#
Equipment, Facilities, & Materials	3.23 (313)	2.99 (210)	3.04 (302)	3.37 (35)	2.64 (12)	3.01 (24)	3.25 (28)	3.27 (75)	3.91	7,991	<0.001+
Textbooks	3.45 (313)	3.70 (206)	3.49 (300)	3.62 (35)	2.03 (12)	3.44 (24)	3.57 (28)		12.18	6,911	<0.001## ******
Teacher's Manual	3.34 (298)	3.29 (207)	3.13 (293)	3.48 (34)	2.34 (12)	3.13 (24)	3.22 (28)		5.66	6,889	<0.001###
PROCESS OF CURRICULUM DEVELOPMENT	3.02 (320)	2.97 (211)	3.01 (309)	3.07 (35)	2.45 (12)	2.83 (23)	3.11 (28)		1.55	6,931	0.159

KEY: SHAR = Shared Subject Matters; ARTS = Arts Subjects; SCI = Science Subjects; ISLA = Islamic Education; ADMIN = Administrators; TCH = Teachers; SPV = Supervisors.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed:

+ = no two groups to differ significantly;

* = TCH SHAR, TCH ARTS, TCH SCI, SPV SHAR, SPV ARTS, SPV SCI, & ADMIN to differ significantly from ISLA
** = TCH ARTS & ADMIN to differ significantly from SPV SHAR
*** = TCH ARTS, TCH SCI & ADMIN to differ significantly from TCH SHAR
**** = TCH ARTS to differ significantly from TCH SCI
***** = TCH ARTS to differ significantly from SPV SHAR
****** = TCH ARTS to differ significantly from TCH SHAR
# = TCH SHAR, TCH ARTS, TCH SCI, SPV SHAR & ADMIN to differ significantly from ISLA
= TCH SHAR, TCH ARTS, TCH SCI, SPV SHAR, SPV ARTS & SPV SCI to differ significantly from ISLA
= TCH SHAR, TCH ARTS, TCH SCI & SPV SHAR to differ significantly from ISLA

respectively]. In addition, the Scheffe showed that teachers of the arts [mean response (+/- s.d.) = 3.70 (0.70)] differed significantly from teachers of the shared subject matters [mean response (+/- s.d.) = 3.45 (0.75)].

The mean responses and the result from statistical comparison of the mean responses given to teachers' manual items by teachers and supervisors from each area of instruction are reported in Table 257. A statistically significant difference between these educator groups was found [$F(6,889) = 5.66$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the groups means found the significant differences identified by the ANOVA to fall between the responses given by Islamic Education supervisors [mean response (+/- s.d.) = 2.34 (0.54)] and the responses given by all other educator groups [mean responses (+/- s.d.) for teachers and supervisors of the shared subject matter were 3.34 (0.69) and 3.44 (0.62) respectively; for teachers of the arts was 3.29 (0.89); for teachers of the sciences was 3.13 (0.71), except supervisors of the arts [mean response (+/- s.d.) = 3.13 (0.56) and supervisors of the sciences [mean response (+/- s.d.) = 3.22 (0.63)].

D. Process of Curriculum Development

The mean responses and the result from statistical comparison of the mean responses given to process of curriculum development items by teachers and supervisors from each area of instruction are reported in Table 257. No

statistically significant differences in the responses given to process of curriculum development items were found between these educator groups [$F(6,931) = 1.55$, $p = 0.159$].

IX. A COMPARISON BY DEMOGRAPHIC AND EDUCATIONAL BACKGROUND OF THE RESPONSES GIVEN TO PROCESS AND PRACTICE, RESOURCES, AND CURRICULUM CONTENT ITEMS BY STUDENTS IN THE ARTS AND SCIENCES SECTIONS: ONE-WAY ANOVA

Two groups of students were sampled and each group responded to one of two questionnaires. As described previously, the first questionnaire assessed the students' satisfaction with the methods of teaching, methods of evaluation, facilities and equipment, and the curriculum content in either the Sciences or Arts program. The latter questionnaire section differed between students identified as in the Arts and Sciences programs. The second questionnaire answered by the second student sample assessed the effectiveness of the textbooks in each subject matter area. The specific questionnaire items differed for students in the Arts and Science programs, with the exception of questionnaire items addressing shared subject matter areas (Islamic Education, Arabic Language, English Languages, and Mathematics). The responses given by each student sample to the respective questionnaires are reported below as a function of four independent variables: gender, nationality, school district, and area of study. The last variable was used only in those cases where both Arts and Sciences students answered the same questions. Tables 258,

259, and 260 indicate the number of students from each sample that fell into each category of the first three independent variables (gender, nationality, and school district). The number of Arts students and Sciences students per sample has been reported elsewhere.

Table 258: Sample of students by gender.

	GENDER	
	Male	Female
ARTS SUBJECTS:*	157	113
SCIENCE SUBJECTS:*	161	100
TEXTBOOK ARTS SUBJECTS:*	86	42
TEXTBOOK SCIENCE SUBJECTS:*	77	47

* population of arts subjects students and science subjects students are further subdivided based on whether they answered the general questionnaire or the textbook questionnaire.

Table 259: Sample of students by nationality.

	NATIONALITY	
	Omani	non-Omani
ARTS SUBJECTS:*	262	7
SCIENCE SUBJECTS:*	243	18
TEXTBOOK ARTS SUBJECTS:*	115	11
TEXTBOOK SCIENCE SUBJECTS:*	116	7

* population of arts subjects students and science subjects students are further subdivided based on whether they answered the general questionnaire or the textbook questionnaire.

Table 260: Sample of students by school district.

	DISTRICT								
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa
ARTS SUBJECTS*:	46	30	30	30	30	31	14	29	30
SCIENCE SUBJECTS*:	30	28	30	30	30	29	30	30	24
TEXTBOOK ARTS SUBJECTS*:	4	14	17	15	16	15	11	14	24
TEXTBOOK SCIENCE SUBJECTS*:	16	11	13	15	14	15	19	16	5

* population of arts subjects students and science subjects students are further subdivided based on whether they answered the general questionnaire or the textbook questionnaire.

A. Gender

Statistically significant differences in the responses given to each questionnaire as a function of students' gender are reported below in text by the topic assessed. In all but a few cases, statistical significance was obtained finding that female students have reported greater satisfaction with all aspects of the secondary school curriculum than male students. The results (mean responses and F values) for students in the Arts and Students in the Science programs are summarized below in Tables 261 and 262 by topic, respectively.

1. Methods of Teaching

Statistically significant differences in the responses given to method of teaching items were found among students in the Arts program [$F(1,266) = 23.22$, $p < 0.001$] and students in the Sciences program [$F(1,253) = 17.39$, $p < 0.001$]. In each case, female students [mean responses (+/- s.d.) were 3.33 (0.90) and 3.32 (0.75) for Arts and Sciences students respectively] reported statistically greater satisfaction with the method of teaching at the secondary school level than male students [mean responses (+/- s.d.) were 2.82 (0.81) and 2.92 (0.73) for Arts and Sciences students respectively].

Table 261: Student response to general questionnaire items and textbook questionnaire items by gender (Arts Program).

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
GENERAL QUESTIONNAIRE					
Methods of Teaching	2.82 (157)	3.33 (111)	23.22	1,266	<0.001*
Facilities	2.76 (157)	2.97 (111)	4.72	1,266	0.031*
Methods of Evaluation	3.00 (156)	3.59 (109)	44.79	1,263	<0.001*
General Curriculum	3.23 (157)	3.72 (112)	64.92	1,267	<0.001*
English Language	2.53 (155)	3.03 (111)	18.99	1,264	<0.001*
History	3.19 (157)	3.75 (112)	76.74	1,267	<0.001*
Geography	2.76 (157)	3.33 (111)	43.60	1,266	<0.001*
Civic Education	3.05 (157)	3.69 (111)	79.48	1,266	<0.001*
Arabic Language	2.76 (152)	3.28 (111)	36.59	1,261	<0.001*
Islamic Education	3.57 (153)	4.06 (111)	33.92	1,262	<0.001*
General Science	3.23 (152)	3.82 (111)	37.12	1,261	<0.001*
Mathematics	2.45 (151)	3.14 (111)	39.15	1,260	<0.001*
TEXTBOOK QUESTIONNAIRE					
Arabic Language	2.80 (86)	3.32 (42)	15.02	1,126	<0.001*
English Language	3.20 (86)	3.16 (42)	<1	1,126	
Islamic Education	2.97 (86)	3.33 (42)	5.14	1,126	0.025*
History	2.78 (85)	3.19 (42)	8.57	1,125	0.004*
Social Studies	2.85 (85)	3.13 (42)	5.10	1,125	0.026*
General Science	3.07 (85)	3.17 (42)	<1	1,125	
Mathematics	2.71 (85)	3.04 (42)	3.62	1,125	0.060

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

Table 262: Student response to general questionnaire items and textbook questionnaire items by gender (Science Program).

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
GENERAL QUESTIONNAIRE					
Methods of Teaching	2.92 (158)	3.32 (97)	17.39	1,253	<0.001*
Facilities	2.63 (157)	3.09 (97)	20.24	1,252	<0.001*
Methods of Evaluation	3.10 (156)	3.50 (96)	18.79	1,250	<0.001*
General Curriculum	3.29 (158)	3.74 (97)	48.04	1,253	<0.001*
Chemistry	3.08 (157)	3.47 (97)	21.29	1,252	<0.001*
Physics	2.86 (158)	3.21 (94)	16.85	1,250	<0.001*
Biology	3.04 (158)	3.74 (94)	59.20	1,250	<0.001*
Mathematics	3.18 (158)	3.52 (97)	14.22	1,253	<0.001*
Arabic Language	3.05 (157)	3.44 (97)	14.47	1,252	<0.001*
Islamic Education	3.71 (157)	4.15 (94)	24.05	1,249	<0.001*
Contemporary Problems	3.38 (157)	4.07 (94)	45.57	1,249	<0.001*
English Language	2.56 (157)	3.14 (97)	27.98	1,252	<0.001*
TEXTBOOK QUESTIONNAIRE					
Arabic Language	2.88 (77)	3.33 (47)	19.06	1,122	<0.001*
English Language	2.95 (77)	3.01 (47)	<1	1,122	
Islamic Education	3.05 (76)	3.24 (47)	1.83	1,121	0.179
Chemistry	3.06 (77)	3.17 (47)	<1	1,122	
Physics	2.76 (77)	3.12 (47)	6.41	1,122	0.013*
Biology	3.27 (77)	3.60 (47)	3.80	1,122	0.054
Mathematics	3.00 (77)	3.26 (47)	4.05	1,122	0.046*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

2. Facilities

Statistically significant differences in the responses given to Facilities items were found among students in the Arts program [$F(1,266) = 4.72$, $p = 0.031$] and students in the Sciences program [$F(1,252) = 20.24$, $p < 0.001$]. In each case, female students [mean responses (+/- s.d.) were 2.97 (0.78) and 3.09 (0.75) for Arts and Sciences students respectively] reported statistically greater satisfaction with the facilities available in the secondary schools in Oman than male students [mean responses (+/- s.d.) were 2.76 (0.79) and 2.63 (0.83) for Arts and Sciences students respectively].

3. Evaluation Methods

Statistically significant differences in the responses given to evaluation method items were found among students in the Arts program [$F(1,263) = 44.79$, $p < 0.001$] and students in the Sciences program [$F(1,250) = 18.79$, $p < 0.001$]. In each case, female students [mean responses (+/- s.d.) were 3.59 (0.65) and 3.50 (0.62) for Arts and Sciences students respectively] reported statistically greater satisfaction with methods of student evaluation at the secondary school level than male students [mean responses (+/- s.d.) were 3.00 (0.75) and 3.10 (0.76) for Arts and Sciences students respectively].

4. General Curriculum

Statistically significant differences in the responses given to general curriculum items were found among students in the Arts program [$F(1,267) = 64.92$, $p < 0.001$] and students in the Sciences program [$F(1,253) = 48.04$, $p < 0.001$]. In each case, female students [mean responses (+/- s.d.) were 3.72 (0.44) and 3.74 (0.42) for Arts and Sciences students respectively] reported statistically greater satisfaction with the general curriculum at the secondary level than male students [mean responses (+/- s.d.) were 3.23 (0.53) and 3.29 (0.55) for Arts and Sciences students respectively].

5. Specific Curriculum Content in The Arts

a. English Language: The response given to the English Language curriculum content items by male and female Arts students differed statistically [$F(1,264) = 18.99$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 3.03 (0.90)] reported greater satisfaction with the English Language curriculum than male Arts students [mean response (+/- s.d.) = 2.53 (0.93)].

b. History: The responses given to the History curriculum content items by male and female Arts students differed statistically [$F(1,267) = 76.74$, $p < 0.001$]; that female Arts students [mean response (+/- s.d.) = 3.75 (0.48)] reported greater satisfaction with the History curriculum than male Arts students [mean response (+/- s.d.) = 3.19 (0.54)].

c. Geography: The responses given to the Geography curriculum content items by male and female Arts students differed statistically [$F(1,266) = 43.60$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 3.33 (0.69)] reported greater satisfaction with the Geography curriculum than male Arts students [mean response (+/- s.d.) = 2.76 (0.71)].

d. Civic Education: The responses given to the Human Culture curriculum content items by male and female Arts students differed statistically [$F(1,266) = 79.48$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 3.69 (0.54)] reported greater satisfaction with the Human Culture curriculum than male Arts students [mean response (+/- s.d.) = 3.05 (0.61)].

e. Arabic Language: The responses given to the Arabic Language curriculum content items by male and female Arts students differed statistically [$F(1,261) = 36.59$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 3.28 (0.72)] reported greater satisfaction with the Arabic Language curriculum than male Arts students [mean response (+/- s.d.) = 2.76 (0.66)].

f. Islamic Education: The responses given to the Islamic Education curriculum content items by male and female Arts students differed statistically [$F(1,262) = 33.92$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 4.06 (0.63)] reported greater satisfaction with the Islamic

Education curriculum content than male Arts students [mean response (+/- s.d.) = 3.57 (0.71)].

g. General Science: The responses given to the General Science curriculum content items by male and female Arts students differed statistically [$F(1,261) = 37.12$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 3.82 (0.71)] reported greater satisfaction with the General Science curriculum content than male Arts students [mean response (+/- s.d.) = 3.23 (0.80)].

h. Mathematics: The responses given to the Mathematics curriculum content items by male and female Arts students differed statistically [$F(1,260) = 39.15$, $p < 0.001$]; female Arts students [mean response (+/- s.d.) = 3.14 (0.79)] reported greater satisfaction with the Mathematics curriculum content than male Arts students [mean response (+/- s.d.) = 2.45 (0.95)].

6. Specific Curriculum Content in The Sciences

a. Chemistry: The responses given to the Chemistry curriculum content items by male and female Sciences students differed statistically [$F(1,252) = 21.29$, $p < 0.001$]; female Sciences students [mean response (+/- s.d.) = 3.47 (0.53)] reported greater satisfaction with the Chemistry curriculum than male Sciences students [mean response (+/- s.d.) = 3.08 (0.72)].

b. Physics: The responses given to the Physics curriculum content items by male and female Sciences students differed

statistically [F(1,250) = 16.85, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 3.21 (0.58)] reported greater satisfaction with the Physics curriculum than male Sciences students [mean response (+/- s.d.) = 2.86 (0.54)].

c. Biology: The responses given to the Biology curriculum content items by male and female Sciences students differed statistically [F(1,250) = 59.20, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 3.74 (0.56)] reported greater satisfaction with the Biology curriculum than male Sciences students [mean response (+/- s.d.) = 3.04 (0.77)].

d. Mathematics: The responses given to the Mathematics curriculum content items by male and female Sciences students differed statistically [F(1,253) = 14.22, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 3.52 (0.65)] reported greater satisfaction with the Mathematics curriculum than male Sciences students [mean response (+/- s.d.) = 3.18 (0.73)].

e. Arabic Language: The responses given to the Arabic Language curriculum content items by male and female Sciences students differed statistically [F(1,252) = 14.47, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 3.44 (0.67)] reported greater satisfaction with the Arabic Language curriculum than male Sciences students [mean response (+/- s.d.) = 3.05 (0.86)].

f. Islamic Education: The responses given to the Islamic Education curriculum content items by male and female

Sciences students differed statistically [F(1,249) = 24.05, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 4.15 (0.54)] reported greater satisfaction with the Islamic Education curriculum content than male Sciences students [mean response (+/- s.d.) = 3.71 (0.77)].

g. Human Culture and Contemporary Problems: The responses given to the Contemporary Problems curriculum content items by male and female Sciences students differed statistically [F(1,249) = 45.57, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 4.07 (0.60)] reported greater satisfaction with the Contemporary Problems curriculum content than male Sciences students [mean response (+/- s.d.) = 3.38 (0.86)].

h. English Language: The responses given to the English Language curriculum content items by male and female Sciences students differed statistically [F(1,252) = 27.98, p < 0.001]; female Sciences students [mean response (+/- s.d.) = 3.14 (0.73)] reported greater satisfaction with the English Language curriculum content than male Sciences students [mean response (+/- s.d.) = 2.56 (0.91)].

7. Textbooks used in both the The Arts and The Sciences

a. Arabic Language: The responses given by Arts and Science students to the Arabic Language texts differed significantly as a function of gender in both student groups [F(1,126) = 15.02, p < 0.001 and F(1,122) = 19.06, p < 0.001 for Arts and Sciences students respectively]. In both

cases, female students [mean responses (+/- s.d.) were 3.32 (0.85) and 3.33 (0.61) for Arts and Sciences students respectively] reported greater satisfaction with the Arabic Language text than male students [mean responses (+/- s.d.) were 2.80 (0.63) and 2.88 (0.52) for Arts and Sciences students respectively].

b. English Language: No statistically significant differences were found in the responses given by male and female students of either the Arts [$F(1,126) < 1$] or the Sciences [$F(1,122) < 1$] to items on the English Language textbooks.

c. Islamic Education: The responses given by students of Arts differed statistically as a function of gender [$F(1,126) = 5.14$, $p = 0.025$]; female students [mean response (+/- s.d.) = 3.33 (1.08)] reported statistically greater satisfaction with the Islamic Education textbooks than male students [mean responses (+/- s.d.) = 2.97 (0.71)]. No statistically significant differences in response to Islamic Education textbooks was found between male and female students of the Sciences.

8. Textbooks used only in The Arts

a. History: The responses given to items on the History textbooks by students in the Arts program differed significantly as function of gender [$F(1,125) = 8.57$, $p = 0.004$]. As in all other analyses, female Arts students [mean response (+/- s.d.) = 3.19 (0.88)] reported greater

satisfaction with the History textbook than male Arts students [mean response (+/- s.d.) = 2.78 (0.69)].

b. Social Studies: The responses given to items on the Social Studies textbooks by students in the Arts program differed significantly as function of gender [$F(1,125) = 5.10$ $p = 0.026$]. As in all other analyses, female Arts students [mean response (+/- s.d.) = 3.13 (0.83)] reported greater satisfaction with the Social Studies textbooks than male Arts students [mean response (+/- s.d.) = 2.85 (0.58)].

c. General Sciences: No statistically significant differences were found in the responses given to the General Science textbook items as a function of the Arts students' gender [$F(1,125) < 1$].

d. Mathematics: Male and female students of the Arts did not differ in the responses they gave to Mathematics textbook items [$F(1,125) = 3.62$, $p = 0.060$].

9. Textbooks used only in The Sciences

a. Chemistry: No statistically significant differences were found in the responses given to the Chemistry textbook items as a function of the Sciences students' gender [$F(1,122) < 1$].

b. Physics: A statistically significant difference was found in the responses to Physics textbook items given by male and female students in the Sciences [$F(1,122) = 6.41$, $p = 0.013$]. Female students [mean response (+/- s.d.) = 3.12

(0.87)] in the Sciences reported statistically greater satisfaction with the Physics textbook than male students in the Sciences [mean response (+/- s.d.) = 2.76 (0.72)].

c. Biology: No statistically significant differences were found in the responses given to the Biology textbook items as a function of the Sciences students' gender [F(1,122) = 3.80, p = 0.054].

d. Mathematics: The responses given by male and female students of the Sciences differed statistically as a function of gender [F(1,122) = 4.05, p = 0.046]. Female students of the Sciences [mean response (+/- s.d) = 3.26 (0.80)] gave slightly, but statistically greater, levels of satisfaction with the mathematics textbook than male students of the Sciences [mean response (+/- s.d.) = 3.00 (0.62)].

B. Nationality

The analysis of the effect of nationality on student response to all portions of the student questionnaire revealed only a few significant results suggesting that the effect of nationality on student response is minimal at best. The results (mean responses and F values) are reported by topic in Tables 263 and 264 for students in the Arts and students in the Sciences respectively. Those analyses that produced significant differences as a function

of nationality are given in text in the following paragraphs.

Nationality statistically differentiated the responses given to English Language items [F(1,263) = 4.08, p 0.045] by students in the Arts, and to Chemistry [F(1,254) = 3.97, p = 0.048] and Biology [F(1,250) = 4.22, p = 0.041] items by students in the Sciences. In all of these cases, non-Omani students reported greater satisfaction than Omani students; however, the qualitative differences in mean responses were small. In addition, Sciences student responses to the Islamic education textbook and mathematics textbook as a function of nationality [F(1,120) = 8.00, p = 0.006 and F(1,21) = 6.26, p = 0.014, respectively]. In both these cases, the responses by Omani students was far more favorable than that of the non-Omani students.

Table 263: Student response to general questionnaire items and textbook questionnaire items by nationality (Arts Program).

	NATIONALITY				
	Omani $\bar{x}$ (n)	non-Omani $\bar{x}$ (n)	F	df	p
GENERAL QUESTIONNAIRE					
Methods of Teaching	3.09 (260)	3.69 (7)	3.16	1,265	0.077
Facilities	2.89 (260)	2.85 (7)	<1	1,265	
Methods of Evaluation	3.23 (257)	3.60 (7)	1.60	1,262	0.208
General Curriculum	3.43 (261)	3.68 (7)	1.44	1,266	0.231
English Language	2.72 (258)	3.45 (7)	4.08	1,263	0.045*
History	3.40 (261)	3.58 (7)	<1	1,266	
Geography	2.99 (260)	3.37 (7)	1.78	1,265	0.184
Civic Education	3.31 (260)	3.71 (7)	2.48	1,265	0.119
Arabic Language	2.97 (256)	3.44 (7)	2.91	1,261	0.089
Islamic Education	3.77 (257)	4.19 (7)	2.36	1,262	0.125
General Science	3.47 (256)	3.71 (7)	<1	1,256	
Mathematics	3.73 (255)	3.17 (7)	1.51	1,260	0.220
TEXTBOOK QUESTIONNAIRE					
Arabic Language	2.95 (115)	3.27 (11)	1.86	1,124	0.175
English Language	3.18 (115)	3.51 (11)	1.15	1,124	0.285
Islamic Education	3.09 (115)	3.17 (11)	<1	1,124	
History	2.90 (115)	3.23 (10)	1.72	1,123	0.193
Social Studies	2.94 (115)	3.07 (10)	<1	1,123	
General Science	3.15 (115)	2.85 (10)	1.13	1,123	0.289
Mathematics	2.81 (115)	3.17 (10)	1.42	1,123	0.235

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.
* = statistically significant

Table 264: Student response to general questionnaire items and textbook questionnaire items by nationality (Science Program).

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
GENERAL QUESTIONNAIRE					
Methods of Teaching	3.08 (242)	2.95 (15)	<1	1,255	
Facilities	2.79 (241)	3.03 (15)	1.18	1,254	
Methods of Evaluation	3.25 (239)	3.26 (15)	<1	1,252	
General Curriculum	3.45 (242)	3.51 (15)	<1	1,255	
Chemistry	3.20 (241)	3.56 (15)	3.97	1,254	0.048*
Physics	2.98 (238)	3.07 (14)	<1	1,250	
Biology	3.28 (238)	3.72 (14)	4.22	1,250	0.041*
Mathematics	3.29 (242)	3.65 (15)	3.62	1,255	0.058
Arabic Language	3.19 (241)	3.37 (15)	<1	1,254	
Islamic Education	3.88 (237)	3.86 (14)	<1	1,249	
Contemporary Problems	3.63 (237)	3.76 (14)	<1	1,249	
English Language	2.77 (241)	3.06 (15)	1.54	1,254	0.215
TEXTBOOK QUESTIONNAIRE					
Arabic Language	3.06 (116)	2.80 (7)	1.29	1,121	0.259
English Language	2.99 (116)	2.86 (7)	<1	1,121	
Islamic Education	3.17 (115)	2.37 (7)	8.00	1,120	0.006*
Chemistry	3.13 (116)	2.74 (7)	1.35	1,121	0.248
Physics	2.92 (116)	2.48 (7)	2.05	1,121	0.155
Biology	3.42 (116)	3.07 (7)	<1	1,121	
Mathematics	3.13 (116)	2.46 (7)	6.26	1,121	0.014*

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

C. School District

Statistically significant differences in the responses given to each questionnaire item as a function of the students' school district are reported below in text by the topic assessed. The results (mean responses and F values) for students in the Arts and Students in the Science programs are summarized in Tables 265 and 266, respectively, by topic.

1. Methods of Teaching

Statistically significant differences in the responses given to method of teaching items were found among students in the Arts program [$F(7,232) = 4.48$, $p < 0.001$] and students in the Sciences program [$F(7,229) = 7.12$, $p < 0.001$]. The Scheffe post-hoc comparison of the group means in each analysis found significant group differences in both cases.

Among students in the Arts, those attending school in the districts of Janoubiyah [mean responses (+/- s.d.) = 2.57 (0.89)] and Sharqiyah [mean response (+/- s.d.) =2.64 (0.74)] reported statistically less satisfaction with the methods of teaching then students in the Arts attending school in Dhahirah [mean response (+/- s.d.) =3.70 (0.52)]

Table 263: Student response to general questionnaire items and textbook questionnaire items by school district (Arts Program).

	DISTRICT											
	Musc X (n)	Bati X (n)	Rous X (n)	Dhak X (n)	Shar X (n)	Wous X (n)	Dhah X (n)	Jano X (n)	Musa X (n)	F	df	p
GENERAL QUESTIONNAIRE												
Methods of Teaching	2.79 (46)	3.10 (30)	3.34 (30)	3.12 (30)	2.64 (30)	3.00 (31)	3.70 (14)	2.57 (29)	---- (0)	4.48	7,232	<0.001*
Facilities	2.91 (46)	2.76 (30)	3.13 (30)	2.75 (30)	2.57 (30)	2.67 (31)	3.47 (14)	2.56 (29)	---- (0)	3.31	7,232	0.002+
Methods of Evaluation	3.20 (44)	3.24 (30)	3.60 (30)	3.24 (30)	2.99 (30)	3.11 (30)	3.67 (14)	3.08 (29)	---- (0)	2.47	7,229	0.018+
General Curriculum	3.32 (46)	3.27 (30)	3.71 (30)	3.40 (30)	3.24 (30)	3.42 (31)	3.70 (14)	3.43 (29)	---- (0)	2.92	7,232	0.006+
English Language	2.82 (46)	2.89 (30)	3.44 (28)	2.79 (30)	2.22 (30)	2.58 (31)	2.97 (14)	2.18 (29)	---- (0)	6.03	7,230	<0.001**
History	3.52 (46)	3.34 (30)	3.49 (30)	3.23 (30)	3.24 (30)	3.36 (31)	3.83 (14)	3.50 (29)	---- (0)	2.35	7,232	0.025+
Geography	2.92 (46)	3.03 (30)	3.31 (30)	2.87 (30)	2.48 (30)	2.96 (31)	3.28 (14)	3.13 (29)	---- (0)	3.54	7,232	0.001***
Civic Education	3.31 (46)	3.43 (30)	3.44 (30)	3.19 (30)	3.20 (30)	3.11 (31)	3.70 (14)	3.31 (29)	---- (0)	1.68	7,232	0.116
Arabic Language	2.72 (44)	3.16 (30)	3.41 (30)	3.00 (30)	2.77 (29)	2.90 (31)	3.25 (14)	2.70 (28)	---- (0)	4.35	7,228	<0.001****
Islamic Education	3.76 (43)	3.85 (30)	3.88 (30)	3.53 (30)	3.71 (30)	3.43 (31)	4.30 (14)	3.77 (29)	---- (0)	2.77	7,229	0.009*****
General Science	3.47 (42)	3.63 (30)	3.66 (30)	3.37 (30)	3.41 (30)	3.04 (31)	3.96 (14)	3.39 (29)	---- (0)	2.49	7,228	0.018+
Mathematics	2.53 (41)	2.88 (30)	3.12 (30)	2.93 (30)	2.43 (30)	2.48 (31)	3.25 (14)	2.80 (29)	---- (0)	2.80	7,227	0.008+
TEXTBOOK QUESTIONNAIRE												
Arabic Language	2.00 (4)	2.88 (14)	2.65 (17)	2.55 (15)	3.14 (16)	3.13 (15)	3.43 (11)	3.47 (14)	2.93 (24)	3.94	8,121	<0.001+
English Language	1.73 (4)	3.46 (14)	2.79 (17)	2.37 (15)	3.10 (16)	3.03 (15)	4.07 (11)	3.74 (14)	3.50 (24)	6.59	8,121	<0.001******
Islamic Education	1.67 (4)	3.26 (14)	2.33 (17)	2.95 (15)	3.85 (16)	2.94 (15)	3.58 (11)	3.79 (14)	2.79 (24)	10.82	8,121	<0.001## ### ###
History	2.09 (4)	3.05 (14)	2.44 (16)	2.54 (15)	3.33 (16)	2.97 (15)	2.67 (11)	3.35 (14)	3.08 (24)	3.79	8,120	<0.001+
Social Studies	1.90 (4)	3.01 (14)	2.85 (16)	2.56 (15)	3.11 (16)	3.12 (15)	3.21 (11)	3.36 (14)	2.73 (24)	3.69	8,120	<0.001#####
General Science	1.76 (4)	3.44 (14)	2.53 (16)	2.69 (15)	3.49 (16)	3.33 (15)	3.82 (11)	3.76 (14)	2.64 (24)	9.29	8,120	<0.001## ######
Mathematics	2.37 (4)	2.81 (14)	3.21 (16)	1.96 (15)	2.39 (16)	2.93 (15)	2.55 (11)	3.19 (14)	3.30 (24)	4.49	8,120	<0.001########

KEY: **Musc** = Muscat; **Bati** = Batinah; **Rous** = Roustaq; **Dhak** = Dakhilyah; **Shar** = Sharqiyah; **Wous** = Wousta; **Dhah** = Dhahirah; **Jano** = Janoubiyah; **Musa** = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed:

\+ = no two groups to be significantly different

* = Dhah to differ significantly from Shar, Jano
** = Rous to differ significantly from Shar, Jano
*** = Rous to differ significantly from Shar
**** = Rous to differ significantly from Musc, Jano
***** = Dhah to differ significantly from Wous
****** = Dhah, Jano to differ significantly from Musc
# = Dhah, Jano, Musa to differ significantly from Dhak
= Bati, Shar, Dhah, Jano to differ significantly from Musc
= Shar, Dhah, Jano to differ significantly from Rous
= Shar, Jano to differ significantly from Musa
= Jano to differ significantly from Musc
= Dhah, Jano to differ significantly from Rous, Dhak, Musa
######## = Rous, Musa to differ significantly from Dhak.

Table 266: Student response to general questionnaire items and textbook questionnaire items by school district (Science Program).

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
GENERAL QUESTIONNAIRE												
Methods of Teaching	2.81 (30)	3.11 (28)	3.06 (30)	3.54 (30)	3.19 (30)	2.36 (29)	3.19 (30)	2.80 (30)	---- (0)	7.12	7,229	<0.001* **
Facilities	2.85 (30)	2.85 (28)	2.47 (30)	3.15 (29)	3.26 (30)	1.99 (29)	2.74 (30)	2.54 (30)	---- (0)	8.81	7,228	<0.001*** ****
Methods of Evaluation	3.21 (30)	3.36 (28)	3.48 (30)	3.35 (29)	3.52 (29)	2.23 (28)	3.37 (30)	3.02 (30)	---- (0)	10.85	7,226	0.001*****
General Curriculum	3.37 (30)	3.50 (28)	3.43 (30)	3.59 (30)	3.63 (30)	2.81 (29)	3.49 (30)	3.36 (30)	---- (0)	6.48	7,229	<0.001*****
Chemistry	3.41 (30)	3.18 (28)	3.25 (30)	3.19 (30)	3.67 (30)	2.34 (28)	3.47 (30)	2.98 (30)	---- (0)	12.78	7,228	<0.001***** ******
Physics	3.00 (30)	2.88 (28)	2.72 (30)	3.33 (30)	3.07 (30)	2.29 (26)	3.30 (29)	2.77 (29)	---- (0)	8.82	7,222	<0.001* **
Biology	3.26 (30)	3.33 (28)	3.24 (30)	3.59 (28)	3.74 (30)	2.62 (26)	3.33 (29)	3.05 (29)	---- (0)	5.75	7,222	<0.001***
Mathematics	3.22 (30)	3.47 (28)	3.21 (30)	3.58 (30)	3.57 (30)	2.33 (29)	3.76 (30)	2.98 (30)	---- (0)	16.80	7,229	<0.001***** ****
Arabic Language	3.11 (30)	3.13 (28)	3.46 (30)	3.39 (30)	3.40 (30)	2.66 (27)	3.45 (30)	2.75 (30)	---- (0)	4.75	7,227	<0.001*****
Islamic Education	3.73 (30)	3.82 (28)	4.12 (30)	4.00 (28)	4.16 (30)	3.27 (25)	4.04 (29)	3.53 (29)	---- (0)	5.52	7,221	<0.001******
Contemporary Problems	3.34 (30)	3.52 (28)	3.75 (30)	3.74 (27)	3.98 (30)	3.02 (26)	3.79 (29)	3.50 (29)	---- (0)	3.89	7,221	<0.001*******
English Language	2.70 (30)	2.71 (28)	2.93 (30)	3.09 (29)	2.96 (30)	1.91 (29)	2.98 (30)	2.49 (30)	---- (0)	6.13	7,228	<0.001*
TEXTBOOK QUESTIONNAIRE												
Arabic Language	2.99 (16)	3.00 (11)	2.80 (13)	3.22 (15)	2.96 (14)	2.58 (15)	3.33 (19)	3.28 (16)	3.30 (5)	2.95	8,115	0.005+
English Language	2.55 (16)	3.55 (11)	2.72 (13)	3.23 (15)	3.30 (14)	2.10 (15)	3.31 (19)	3.02 (16)	3.27 (5)	6.24	8,115	<0.001**
Islamic Education	2.94 (16)	3.22 (11)	2.83 (13)	3.09 (14)	3.57 (14)	2.78 (15)	3.08 (19)	3.49 (16)	3.09 (5)	2.06	8,114	0.046+
Chemistry	2.95 (16)	3.54 (11)	2.51 (13)	3.44 (15)	3.65 (14)	2.10 (15)	3.35 (19)	3.29 (16)	3.10 (5)	7.13	8,115	<0.001*** ****
Physics	3.18 (16)	2.63 (11)	3.01 (13)	3.02 (15)	2.84 (14)	1.93 (15)	3.00 (19)	3.21 (16)	3.13 (5)	4.21	8,115	<0.001*****
Biology	2.34 (16)	3.52 (11)	2.64 (13)	3.43 (15)	4.02 (14)	3.46 (15)	3.82 (19)	3.89 (16)	3.23 (5)	8.83	8,115	<0.001******* *******
Mathematics	2.87 (16)	3.14 (11)	2.91 (13)	3.19 (15)	3.37 (14)	2.43 (15)	3.33 (19)	3.41 (16)	3.21 (5)	3.38	8,115	0.002********

KEY: Musc = Muscat; Bati = Batinah; Rous = Roustaq; Dhak = Dakhiliyah; Shar = Sharqiyah; Wous = Wousta; Dhah = Dhahirah; Jano = Janoubiyah; Musa = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed:

\+ = no two groups to be significantly different

* = Bati, Rous, Dhak, Shar, Dhah to differ significantly from Wous
** = Dhak to differ significantly from Musc, Jano
*** = Musc, Bati, Dhak, Shar, Dhah to differ significantly from Wous
**** = Shar to differ significantly from Rous, Jano
***** = Musc, Bati, Rous, Dhak, Shar, Dhah, Jano to differ significantly from Wous
****** = Shar to differ significantly from Jano
* = Musc, Dhak, Shar, Dhah to differ significantly from Wous
** = Dhak to differ significantly from Rous
*** = Dhak, Shar to differ significantly from Wous
**** = Dhak, Shar, Dhah to differ significantly from Jano
***** = Rous, Dhah to differ significantly from Wous
****** = Rous, Dhak, Shar, Dhah to differ significantly from Wous
******* = Shar to differ significantly from Rous
* = Rous, Musa to differ significantly from Dhak,
** = Bati, Dhak, Shar, Dhah to differ significantly from Wous
*** = Bati, Dhak, Shar, Dhah, Jano to differ significantly from Wous
**** = Shar to differ significantly from Musc
***** = Musc, Dhak, Dhah, Jano to differ significantly from Wous
****** = Bati, Dhak, Shar, Wous, Dhah, Jano to differ significantly from Musc
******* = Shar, Dhah, Jano to differ significantly from Rous
******** = Jano to differ significantly from Wous

Among students in the Sciences, those attending school in the districts of Wousta [mean response (+/- s.d.) = 2.36 (0.71)], Janoubiyah [mean response (+/- s.d.) = 2.80 (0.75)], and Muscat [mean response (+/- s.d.) = 2.81 (0.60)] reported statistically less satisfaction with the methods of teaching then students in the Sciences that attended school in the district of Dakhilyah [mean response (+.- s.d.) = 3.54 (0.63)]. Students in the Sciences attending school in the district of Wousta also differed significantly from students in the Sciences attending school in the districts of Sharqiyah [mean response (+/- s.d.) = 3.19 (0.80)], Dhahirah [mean response (+/- s.d.) = 3.19 (0.90)], Batinah [mean response (+/- s.d.) = 3.11 (0.56)], and Roustaq [mean response (+/- s.d.) = 3.06 (0.63)].

2. Materials and Facilities

Statistically significant differences in the responses given to Facilities items were found as a function of school district among students in the Arts program [$F(7,232) = 3.31$, $p = 0.002$] and students in the Sciences program [$F(7,228) = 8.81$, $p < 0.001$]. The Scheffe post hoc pairwise comparison of the groups' means in each analysis found statistically significant group differences among students in the Sciences only.

Among students in the Sciences, those attending school in the district of Wousta [mean response (+/- s.d.) = 1.99 (0.70)], Roustaq [mean response (+/- s.d.) = 2.47 (0.73)],

and Janoubiyah [mean response (+/- s.d.) = 2.54 (0.61)] reported statistically less satisfaction with the Facilities than students in the Sciences attending school in Sharqiyah [mean response (+/- s.d.) = 3.26 (0.69)]. Students in the Sciences attending school in Wousta also differed statistically from students in the Sciences attending school in Dakhilyah [mean response (+/- s.d.) = 3.15 (0.82)], Batinah [mean response (+/- s.d.) = 2.85 (0.70)] , Muscat [mean response (+/- s.d.) = 2.85 (0.72)], and Dhahirah [mean response (+/- s.d.) = 2.74 (0.70)].

3. Student Evaluations

Statistically significant differences in the responses given to items on evaluation methods were found as a function of school district among students in the Arts program [$F(7,229) = 2.47$, $p < 0.018$] and students in the Sciences program [$F(7,226) = 10.85$, $p < 0.001$]. The Scheffe post hoc pairwise comparison of the group mean in each analysis found statistically significant differences in the analysis of students in the Sciences only.

Among students in the Sciences, those attending school in the district of Wousta [mean response (+/- s.d.) = 2.23 (0.69)] reported significantly less satisfaction with the methods of evaluation than students attending any other school district [mean responses (+. s.d.) for each district were 3.21 (0.63) Muscat, 3.36 (0.63) Batinah, 3.48 (0.65)

Roustaq, 3.35 (0.72) Dakhilyah, 3.52 (0.59) Sharqiyah, 3.37 (0.79) Dhahirah, and 3.02 (0.68) Janoubiyah].

4. General Curriculum

Statistically significant differences in the responses given to general curriculum items as a function of school district were found among students in the Arts program [$F(7,232) = 2.92$, $p = 0.006$] and students in the Sciences program [$F(7,229) = 6.48$, $p < 0.001$]. The Scheffe post hoc pairwise comparison of the group means in each analysis found statistically significant group differences in the analysis of the students of the Sciences only.

Among students in the Sciences, those attending school in the district of Wousta [mean response (+/- s.d.) = 2.81 (0.90)], reported significantly less satisfaction with the general curriculum items than students attending any other school district [mean responses (+. s.d.) for each district were 3.37 (0.49) Muscat, 3.50 (0.36) Batinah, 3.43 (0.39) Roustaq, 3.59 (0.61) Dakhilyah, 3.63 (0.44) Sharqiyah, 3.49 (0.45) Dhahirah, and 3.36 (0.53) Janoubiyah].

5. Specific Curriculum Content in The Arts

a. English Language: The response given to the English Language curriculum content items by Arts students differed statistically as a function of school district [$F(7,230) = 6.03$, $p < 0.001$]. The Scheffe pairwise comparisons of the group means found that students in the Arts attending school

in the districts of Janoubiyah [mean response (+/- s.d.) = 2.18 (0.86)] and Sharqiyah [mean response (+/- s.d.) = 2.22 (0.74)] reported significantly less satisfaction with the English Language curriculum than students in the Arts students attending school in the district of Roustaq [mean response (+/- s.d.) = 3.44 (0.62)].

b. History: The response given to the History curriculum content items by students in the Arts differed statistically as a function of the students' school districts [$F(7,232) = 2.35$, $p = 0.025$]. However, the Scheffe pairwise comparison of the group means found no two groups to differ statistically at $p < 0.05$.

c. Geography: The response given to the Geography curriculum content items by students in the Arts differed statistically as a function of the students' school districts [$F(7,232) = 3.54$, $p = 0.001$]. The Scheffe pairwise comparison of the group means found students in the Arts from the school district of Sharqiyah [mean response (+/- s.d.) = 2.48 (0.83)] reported statistically less satisfaction with the Geography curriculum than students in the Arts from the district of Roustaq [mean response (+/- s.d.) = 3.31 (0.76)].

d. Civic Education: The response given to the Civic Education and Human Culture curriculum content items by students in the Arts did <u>not</u> differ statistically as a

function of the students' school districts [F(7,232) = 1.68, p = 0.116].

e. Arabic Language: The response given to the Arabic Language curriculum content items by students in the Arts differed statistically as a function of the students' school districts [F(7,228) = 4.35, p < 0.001]. The Scheffe pairwise comparison of the group means found a statistically significant difference between the responses given by students from Janoubiyah [mean response (+/- s.d.) = 2.70 (0.59)] and Muscat [mean response (+/- s.d.) = 2.72 (0.64)] and the responses given by students from Roustaq [mean response (+/- s.d.) = 3.41 (0.62)]. In this case, the mean responses of student in the three districts indicate that students from Janoubiyah and Muscat are less satisfied with the Arabic Language Curriculum than students from Roustaq.

f. Islamic Education: The response given to the Islamic Education curriculum content items by students in the Arts differed statistically as a function of the students' school districts [F(7,229) = 2.77, p = 0.009]. The Scheffe pairwise comparison of the group means found statistically significant group differences in the response given to the Islamic Education curriculum between students in Wousta [mean response (+/- s.d.) = 3.43 (0.83)] and students in Dhahirah [mean response (+/- s.d.) = 4.30 (0.32)].

g. General Science: The response given to the General Science curriculum content items by students in the Arts

differed statistically as a function of the students' school districts [F(7,228) = 2.49, p = 0.018]. However, the Scheffe pairwise comparison of the group means found no two groups to differ significantly at $p < 0.05$.

h. Mathematics: The response given to the Mathematics curriculum content items by students in the Arts differed statistically as a function of the students' school districts [F(7,227) = 2.80, p = 0.008]. However, the Scheffe pairwise comparison of the group means did not find any two groups to differ significantly at $p < 0.05$.

6. Specific Curriculum Content in The Sciences

a. Chemistry: The response given to the Chemistry curriculum content items by students in the Sciences differed statistically as a function of the students' school districts [F(7,228) = 12.78, $p < 0.001$]. The Scheffe pairwise comparison of the group means found students of the Sciences attending school in the district of Wousta [mean response (+/- s.d.) = 2.34 (0.78)] to differ statistically from all other groups [mean responses (+/- s.d.) were 3.41 (0.40) Muscat, 3.18 (0.69) Batinah, 3.25 (0.61) Roustaq, 3.19 (0.65) Dakhilyah, 3.67 (0.53) Sharqiyah, 3.47 (0.71) Dhahirah, and 2.98 (0.56) Janoubiyah], reporting far less satisfaction with the Chemistry curriculum. In addition, students in the Sciences attending school in Janoubiyah reported statistically less satisfaction with the Chemistry

curriculum than students in the Sciences attending school in Sharqiyah.

b. Physics: The response given to the Physics curriculum content items by students in the Sciences differed statistically as a function of the students' school districts [$F(7,222) = 8.82$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found students in the Sciences from Wousta [mean response (+/- s.d.) = 2.29 (0.69)] to differ statistically from students in the Sciences from Dakhilyah [mean response (+/- s.d.) = 3.33 (0.70)], Dhahirah [mean response (+/- s.d.) = 3.30 (0.60)], Sharqiyah [mean response (+/- s.d.) = 3.07 (0.54)], and Muscat [mean response (+/- s.d.) = 3.00 (0.46)], reporting statistically less satisfaction with the Physics curriculum. In addition, students from Roustaq [mean response (+/- s.d.) = 2.72 (0.53)] differed statistically from students from Dakhilyah.

c. Biology: The response given to the Biology curriculum content items by students in the Sciences differed statistically as a function of school district [$F(7,222) = 5.75$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found statistically significant differences between students in the Sciences attending Wousta [mean response (+/- s.d.) = 2.62 (1.05)] and student of the Sciences attending Dakhilyah [mean response (+/- s.d.) = 3.59 (0.57)] and Sharqiyah [mean response (+/- s.d.) = 3.74

(0.57)]. In this case, students from Wousta indicated that they were least satisfied with the Biology curriculum.

d. Mathematics: The response given to the Mathematics curriculum content items by students in the Sciences differed statistically as a function of the students' school district [$F(7,229) = 16.80$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found statistically significant differences between students from Wousta [mean response (+/- s.d.) = 2.33 (0.74)] and students from all other districts [mean responses (+/- s.d.) were 3.22 (0.56) Muscat, 3.47 (0.77) Batinah, 3.21 (0.40) Roustaq, 3.58 (0.50) Dakhilyah, 3.57 (0.55) Sharqiyah, 3.76 (0.57) Dhahirah, and 2.98 (0.66) Janoubiyah. Students in the Sciences from Wousta were least satisfied with the Mathematics curriculum. In addition, the responses of students from Janoubiyah differed statistically from the responses given by students from Dhahirah, Dakhilyah, and Sharqiyah.

e. Arabic Language: The responses given to the Arabic Language curriculum content items by students in the Sciences differed statistically as a function of the students' school district [$F(7,227) = 4.75$, $p < 0.001$]. The Scheffe pairwise comparison of the Group means found statistically significant differences in the responses given by students from Wousta [mean response (+/- s.d.) = 2.66 (1.11)] and by students from Roustaq [mean response (+/-

s.d.) = 3.46 (0.71)] and Dhahirah [mean response (+/- s.d.) = 3.45 (0.89)]. Students from Wousta reported the least satisfaction with the Arabic Language curriculum content.

f. Islamic Education: The response given to the Islamic Education curriculum content items by students in the Sciences differed statistically as a function of the students' school district [$F(7,221) = 5.52$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found statistically significant differences between students attending school in Wousta [mean response (+/- s.d.) = 3.27 (1.09)] and students attending school in Dakhilyah [mean response (+/- s.d.) = 4.00 (0.82)], Dhahirah [mean response (+/- s.d.) = 4.04 (0.67)], Roustaq [mean response (+/- s.d.) = 4.12 (0.48)], and Sharqiyah [mean response (+/- s.d.) = 4.16 (0.41)]. The mean responses indicate that students from Wousta reported less satisfaction with the Islamic Education curriculum content than students from any other district and significantly less satisfaction then students from Dakhilyah, Dhahirah, Roustaq, and Sharqiyah.

g. Human Cultures and Contemporary Problems: The response given to the Contemporary Problems curriculum content items by students in the Sciences differed statistically as a function of the students' school districts [$F(7,221) = 3.89$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found statistically significant differences between students from the district of Wousta [mean response (+/-

s.d.) = 3.02 (0.99)] and students from the district of Sharqiyah [mean response (+/- s.d.) = 3.98 (0.62)]. Students of the Sciences from Wousta reported statistically less satisfaction with the Contemporary Problems curriculum than students from Sharqiyah.

h. English Language: The response given to the English Language curriculum content items by students in the Sciences differed statistically as a function of the students' school districts [$F(7,228) = 6.13$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found students form Wousta [mean response (+/- s.d.) = 1.91 (0.86)] to differ significantly from students from Dakhilyah [mean response (+/- s.d.) = 3.09 (0.78)], Dhahirah [mean response (+/- s.d.) = 2.98 (0.93)], Sharqiyah [mean response (+/- s.d.) = 2.96 (0.62)], and Roustaq [mean response (+/- s.d.) = 2.93 (0.78)].

7. Textbooks used in both the The Arts and The Sciences

a. Arabic Language: The responses given by Arts and Science students to the Arabic Language textbooks differed significantly as a function of school district in both student groups [$F(8,121) = 3.94$, $p < 0.001$ and $F(8,115) = 2.95$, $p = 0.005$ for Arts and Sciences students respectively]. In both cases, the Scheffe pairwise comparison of the group means failed to find any statistically significant group differences at $p < 0.05$.

b. English Language: Statistically significant differences as a function of school district were found in the responses given to English Language textbook items by students of either the Arts [$F(8,121) = 6.59$, $p < 0.001$] or the Sciences [$F(8,115) = 6.24$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found statistically significant differences between districts in both the students in the Arts and students in the Sciences analyses.

Among students in the Arts, those attending school in Muscat [mean response (+/- s.d.) = 1.73 (0.21)], report statistically less satisfaction with the English Language textbooks than those attending school in either Dhahirah [mean response (+/- s.d.) = 4.07 (0.61)] or Janoubiyah [mean response (+/- s.d.) = 3.74 (0.74)]. And, those students in the Arts attending school in Dakhilyah [mean response (+/- s.d.) = 2.37 (0.87)] reported statistically less satisfaction with the English Language textbooks than those attending either Dhahirah, Janoubiyah, or Musandam [mean response (+/- s.d.) = 3.50 (0.99)].

Among students in the Sciences, those attending school in Wousta [mean response (+/- s.d.) = 2.10 (0.75)], reported statistically less satisfaction with the English Language textbooks than those attending school in Dakhilyah [mean response (+/- s.d.) = 3.23 (0.77)], Sharqiyah [mean response (+/- s.d.) = 3.30 (0.52)], Dhahirah [mean response (+/-

s.d.) = 3.31 (0.77)], or Batinah [mean response (+/- s.d.) = 3.55 (0.69)].

c. Islamic Education: The responses given to the Islamic Education textbook items by students of Arts and students of the Sciences differed statistically as a function of school district [$F(8,121) = 10.82$, $p = 0.001$ and $F(8,114) = 2.06$, $p = 0.046$, respectively]. The Scheffe pairwise comparison of the group means in each significant analysis found statistically significant group differences among students of the Arts only.

Among students in the Arts, those attending school in Roustaq [mean response (+/- s.d.) = 2.33 (0.58)] reported less satisfaction with the Islamic Education textbooks than those attending Sharqiyah [mean response (+/- s.d.) = 3.85 (0.59)], Janoubiyah [mean response (+/- s.d.) = 3.79 (0.54)], and Dhahirah [mean response (+/- s.d.) = 3.58 (.74)]. Students of the Arts attending school in Musandam [mean response (+/- s.d.) = 2.79 (0.84)] reported statistically less satisfaction with the Islamic Education textbooks when compared to students attending school in Sharqiyah or Janoubiyah. Finally, those attending school in Muscat [mean response (+/- s.d.) = 1.67 (0.39)] reported statistically less satisfaction with the Islamic Education textbooks than those attending school in Sharqiyah, Janoubiyah, Dhahirah, or Batinah [mean response (+/- s.d.) = 3.26 (0.60)]. However, only 4 students from Muscat

responded to these items and consequently this particular result is unreliable.

8. Textbooks used only in The Arts

a. History: The responses given to items on the History textbooks by students in the Arts program differed significantly as function of school district [$F(8,120) = 3.79$, $p < 0.001$]. The Scheffe pairwise comparison of the group mean in the probe of the significant ANOVA did not identify any statistically significant group differences at $p < 0.05$.

b. Social Studies: The responses given to items on the Social Studies textbooks by students in the Arts program differed significantly as function of school district [$F(8,120) = 3.69$ $p < 0.001$]. The Scheffe pairwise comparison of the group means in this analysis found students in the Arts from Muscat [mean response (+/- s.d.) = 1.90 (0.42)] to report statistically less satisfaction with the Social Studies textbooks than students from Janoubiyah [mean response (+/- s.d.) = 3.36 (0.77)]. However, as mentioned previously, only 4 students in the Arts from Muscat were sampled and any conclusion drawn from this particular result is compromised by the very small number of students (in the Arts) from Muscat.

c. General Sciences: Statistically significant differences in response to General Sciences textbook items by students in the Arts were found as a function of school

district [F(8,120) = 9.29, p < 0.001]. The Scheffe post-hoc pairwise comparison of the group means found statistically significant differences among the Arts students by their school district. Specifically, students in the Arts from Musandam [mean response (+/- s.d.) = 2.64 (0.61)], Roustaq [mean response (+/- s.d.) = 2.53 (0.55)], and Dakhilyah [mean response (+/- s.d.) = 2.69 (0.62)] reported statistically less satisfaction with the General Science textbooks that students in the Arts from Dhahirah [mean response (+/- s.d.) = 3.82 (0.54)] and Janoubiyah [mean response (+/- s.d.) = 3.76 (0.97)]. In addition, students in the Arts from Muscat [mean response (+/- s.d.) = 1.76 (0.59)] were found again to report statistically less satisfaction then students in the Arts from several other districts (e.g. Janoubiyah), however, this result is compromised by the small number of students (n = 4) from Muscat responding to this portion of the questionnaire.

d. Mathematics: The responses given to Mathematics textbook(s) items by students of the Arts differed statistically as a function of school district [F(8,120) = 4.49, p < 0.001]. The Scheffe post-hoc pairwise comparison of the group means did find statistically significant differences between districts. Specifically, students in the Arts from Dakhilyah [mean response (+/- s.d.) = 1.96 (0.50)] reported significantly less satisfaction with the Mathematics textbooks as compared to students in the Arts

from Musandam [mean response (+/- s.d.) = 3.30 (0.87)] and Roustaq [mean response (+/- s.d.) = 3.21 (0.79)].

9. Textbooks used only in The Sciences

a. Chemistry: Statistically significant differences in the responses given to Chemistry textbook items by students of the Sciences were found as a function of the students' school district [$F(8,115) = 7.13$, $p < 0.001$]. The post-hoc Scheffe pairwise comparison of the group means found students in the Sciences from Wousta [mean response (+/- s.d.) = 2.10 (0.87)] to report statistically less satisfaction with the Chemistry textbook(s) than students in the Sciences from Janoubiyah [mean response (+/- s.d.) = 3.29 (0.60)], Dhahirah [mean response (+/- s.d.) = 3.35 (0.77)], Dakhilyah [mean response (+/- s.d.) = 3.44 (0.67)], Batinah [mean response (+/- s.d.) = 3.54 (0.64)], and Sharqiyah [mean response (+/- s.d.) = 3.65 (0.72)]. In addition, students from Roustaq [mean response (+/- s.d.) = 2.51 (0.67)] were also found to report less satisfaction with the Chemistry textbook(s) than students from Sharqiyah.

b. Physics: Statistically significant differences in the responses given to Physics textbook items by students in the Sciences were found as a function of school district [$F(8,115) = 4.21$, $p < 0.001$]. The Scheffe pairwise comparison of the Group means found the statistical differences to lie between students from Wousta [mean

response (+/- s.d.) = 1.93 (0.67)] and students from Dhahirah [mean response (+/- s.d.) = 3.00 (0.76)], Dakhilyah [mean response (+/- s.d.) = 3.02 (0.77)], Muscat [mean response (+/- s.d.) = 3.18 (0.72)] and Janoubiyah [mean response (+/- s.d.) = 3.21 (0.75)]. In this case, as in most other cases of Sciences students, those attending school in Wousta were least satisfied with the Physics textbook(s).

c. Biology: Statistically significant differences in the responses given to the Biology textbook items by students in the Sciences were found as a function of the Sciences students' school district [$F(8,115) = 8.83$, $p < 0.001$]. The Scheffe pairwise comparison of the group means found the statistical significance to fall between (a) students from Muscat [mean response (+/- s.d.) = 2.33 (0.59)] and students from Dakhilyah [mean response (+/- s.d.) = 3.43 (0.72)], Wousta [mean response (+/- s.d.) = 3.46 (1.14)], Batinah [mean response (+/- s.d.) = 3.52 (0.50)], Dhahirah [mean response (+/- s.d.) = 3.82 (0.58)], Janoubiyah [mean response (+/- s.d.) = 3.89 (0.40)], and Sharqiyah [mean response (+/- s.d.) = 4.02 (0.51)]; and, (b) students from Roustaq [mean response (+/- s.d.) = 2.64 (0.79)] and students from Dhahirah, Janoubiyah, and Sharqiyah.

d. Mathematics: The responses given students of the Sciences to Mathematics textbook items differed statistically as a function of school district [$F(8,115) =$

3.38, p = 0.002]. The Scheffe pairwise comparison of the group means found a significant difference between the responses given by students from Wousta [mean response (+/- s.d.) = 2.43 (1.00)] and the responses given by students from Janoubiyah [mean response (+/- s.d.) = 3.41 (0.62)]. As has been typical of students in the Sciences, those from Wousta reported the least satisfaction with the Mathematics textbook.

D. Section of Study

Several section of each student questionnaire were given to both students in the Arts and students in the Sciences, including the method of teaching items, facility items, evaluation items, general curriculum items, and items on the Islamic Education, Arabic Language, and English Language textbooks. The responses of Art students and Science students to each of these portions of the students questionnaire were compared statistically by one-way ANOVA. The results or present in Table 267 and are discussed in text below.

Students of the Arts and students of the Science did not differ in their evaluation of the methods of teaching [F(1,515) < 1], facilities [F(1,514) < 1], methods of evaluation [F(1,509) < 1], or the curriculum in General [F(1,516) < 1]. Their evaluation of the textbooks was also similar and did not differ statistically in the analysis of

the Islamic Education textbook(s) [F(1,247) = 2.34), p = 0.127] or Arabic Language textbook(s) [F(1,247) < 1]. The analysis of the English Language textbook by students in the Arts and students in the Sciences did differ statistically at p = 0.05 [F(1,247) = 3.89, p = 0.050]. In this analysis, students in the Art evaluated the English language textbook slightly but significantly better than students in the Sciences.

Table 267: A comparison of arts student and science student response to common general questionnaire items and common textbook questionnaire items.

	STUDENT				
	Arts $\bar{X}$ (n)	Science $\bar{X}$ (n)	F	df	p
GENERAL QUESTIONNAIRE					
Methods of Teaching	3.03 (260)	3.07 (257)	<1	1,515	
Facilities	2.84 (260)	2.79 (256)	<1	1,514	
Methods of Evaluation	3.22 (257)	3.24 (254)	<1	1,509	
General Curriculum	3.44 (261)	3.43 (257)	<1	1,516	
TEXTBOOK QUESTIONNAIRE					
Arabic Language	2.99 (128)	3.05 (121)	<1	1,247	
English Language	3.18 (86)	2.96 (42)	3.89	1,247	0.050*
Islamic Education	3.09 (128)	3.25 (121)	2.34	1,247	0.127

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

X. COMPARISON BY DEMOGRAPHIC AND EDUCATIONAL BACKGROUND OF THE RESPONSES GIVEN TO PROCESS AND PRACTICE, RESOURCES, AND CURRICULUM CONTENT ITEMS BY GRADUATES: ONE-WAY ANOVA

One hundred and ten graduates of the Omani educational system were sampled, and responded to a series of question about the curriculum content in general ('general curriculum content'), method of teaching in Oman ('method of teaching'), methods of student evaluation ('methods of evaluation'), the availability and quality of the facilities ('facilities') and the availability and quality of the textbooks ('textbooks'). The character of responses given to these items (mean response and frequency of response types) by people that graduated recently from the Omani school system have been summarized earlier in this chapter (see section III. Descriptive analysis of the data). Below the results from the comparison of the graduates' response to the five topic just listed as function of their gender, nationality, school district, level of continuing education, and the nature of their current employment are reported. The number of graduates falling into each category of each of the five independent variables are given in Tables 268 through 272 below.

Table 268: Sample of graduates by gender.

	GENDER	
	Male	Female
	80	30

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Table 269: Sample of graduates by nationality.

NATIONALITY	
Omani	Non-Omani
107	3

Table 270: Sample of graduates by school district.

DISTRICT								
Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa
30	23	10	15	11	5	11	2	2

Table 271: Sample of graduates by level of continuing education.

LEVEL			
EDUCATION & ISLAMIC SCIENCES	ENGINEERING	INTERIM COLLEGE FOR TEACHERS	OTHER
22	40	19	28

Table 272: Sample of graduates by current employment.

CURRENT EMPLOYMENT		
CLERICAL WORK	TECHNICAL WORK	ADMINISTRATIVE WORK
71	16	16

All statistical analyses were by one-way ANOVA and, if warranted, a Scheffe pairwise comparison of the group means. The results are reported by independent variable.

A. Gender: The results (mean responses and F values) obtained from the one-way analyses of the effect of gender on graduate subject response to general curriculum items, method of teaching items, method of evaluation items, facilities items and textbook items are reported in Table 273 below. No statistically significant differences between male and female graduates from the Omani school systems were found in the analyses of the items assessing general curriculum content [$F(1,108) = 3.13$, $p = 0.080$], methods of evaluation [$F(1,107) = 2.79$, $p = 0.098$], Facilities [$F(1,108) = 3.06$, $p = 0.083$], and textbooks [$F(1,107) < 1$]. However, in response to methods of teaching questionnaire items, male and female graduates of the Omani educational system reported statistically different levels of satisfaction [$F(1,108) = 5.17$, $p = 0.025$]. This small but significant difference found female graduates [mean response (+/- s.d.) = 3.17 (0.84) to report greater satisfaction than male graduates [mean response (+/- s.d.) = 2.78 (0.78)].

B. Nationality: The mean responses (+/- s.d.) from the comparison of the graduates responses to each section of their questionnaire as a function of their nationality are reported in Table 274 below. No statistical comparison were performed because fewer than 5 graduates were of non-Omani

Table 273: Graduate response to graduate questionnaire items by gender.

	GENDER				
	Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
General Curriculum	3.31 (80)	3.53 (30)	3.13	1,108	0.080
Method of Teaching	2.78 (80)	3.17 (30)	5.17	1,108	0.025*
Facilities	2.68 (80)	2.98 (30)	3.06	1,108	0.083
Method of Evaluation	3.28 (79)	3.53 (30)	2.79	1,107	0.098
Textbooks	3.07 (79)	3.18 (30)	<1	1,107	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

* = statistically significant

nationality, too few to permit reliable statistical comparisons.

Table 274: Graduate response to graduate questionnaire items by nationality.

	NATIONALITY				
	Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
General Curriculum	3.37 (107)	3.50 (3)			
Method of Teaching	2.89 (107)	2.65 (3)			
Facilities	2.76 (107)	2.95 (3)			
Method of Evaluation	3.34 (106)	3.76 (3)			
Textbooks	3.09 (106)	3.45 (3)			

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

C. School District: The results (mean responses and F values) from the comparison of the graduates responses to each section of their questionnaire as a function of their previous school district are reported below in Table 275. Statistically significant differences by one-way ANOVA were found in the analyses of the graduates' response to general curriculum content items [$F(8,100) = 3.17$, $p = 0.003$] and facilities items [$F(8,100) = 2.06$, $p = 0.047$]. The Scheffe pairwise comparison of the nine districts in these significant analyses did not find the responses of graduates from any two districts to differ significantly. No significant differences among graduates as a function of school district were found in the analyses of method of

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teaching items [F(8,100) = 1.63, p = 0.127], methods of evaluation items [F(8,99) < 1], or textbook items [F(8,99) = 1.19, p = 0.312]. It should be noted that these comparisons did not reliably assess graduates who attended school in Janoubiyah or Musandam because too few responded to these questionnaire items (less than 5).

Table 275: Graduate response to graduate questionnaire items by school district.

	DISTRICT											
	Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
General Curriculum	3.28 (30)	3.12 (23)	3.33 (10)	3.62 (15)	3.90 (11)	3.49 (5)	3.37 (11)	2.64 (2)	3.83 (2)	3.17	8,100	0.003+
Method of Teaching	2.86 (30)	2.52 (23)	2.92 (10)	3.14 (15)	3.36 (11)	2.88 (5)	2.72 (11)	2.38 (2)	3.54 (2)	1.63	8,100	0.127
Facilities	2.77 (30)	2.63 (23)	2.53 (10)	2.95 (15)	3.40 (11)	2.86 (5)	2.26 (11)	2.26 (2)	3.18 (2)	2.06	8,100	0.047+
Method of Evaluation	3.34 (30)	3.32 (23)	3.26 (10)	3.38 (14)	3.73 (11)	3.16 (5)	3.25 (11)	2.64 (2)	3.64 (2)	<1	8,99	
Textbooks	3.00 (30)	2.85 (23)	3.26 (10)	3.32 (14)	3.57 (11)	3.35 (5)	2.84 (11)	2.77 (2)	3.32 (2)	1.19	8,99	0.312

KEY: **Musc** = Muscat; **Bati** = Batinah; **Rous** = Roustaq; **Dhak** = Dakhilyah; **Shar** = Sharqiyah; **Wous** = Wousta; **Dhah** = Dhahirah; **Jano** = Janoubiyah; **Musa** = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different.

D. Level of Continuing Education: The results (mean responses and F values) obtained from the comparison of graduates' responses to their questionnaire items as a function of the type and amount of education they received after secondary school are reported in Tables 276 below. Graduates were distributed into one of four types of continuing education: Education and Islamic Sciences,

Engineering, Interim college for teachers, and Other. Statistically significant differences in the responses given by graduates from different types of continuing education were found in the analyses of facilities [$F(3,105) = 5.29$, $p = 0.002$], methods of evaluation [$F(3,104) = 3.11$, $p = 0.030$], and textbooks [$F(3,104) = 3.58$, $p = 0.016$]. The Scheffe pairwise comparison of the group means in these significant analyses found specific (significant) group differences in the analysis of facilities and textbooks only. In response to facilities items, graduates that fell into the 'other' category [mean response (+/- s.d.) = 3.24 (0.72)] reported the greatest level of satisfaction to the facilities, statistically different from graduates that continued their education in Engineering [mean response (+/- s.d.) = 2.56 (0.74)] or in an interim college for teachers [mean response (+/- s.d.) = 2.57 (0.69)]. In response to textbook items, graduates that fell into the 'other' category [mean response (+/- s.d.) = 3.45 (0.67)] reported the greatest level of satisfaction, statistically greater than graduates that continued their education at an Interim college for teachers [mean response (+/- s.d.) = 2.73 (0.99)].

No statistically significant differences were found in the responses given by graduates to general curriculum content items or methods of teaching items as a function of

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the type of continuing education they received [F(3,105) = 1.46, p = 0.230 and F(3,105) < 1, respectively].

Table 276: Graduate response to graduate questionnaire items by level of continuing education.

	LEVEL						
	EDUC & ISL_SCI $\bar{X}$ (n)	ENGIN $\bar{X}$ (n)	INT COLL FOR TCH $\bar{X}$ (n)	OTHER $\bar{X}$ (n)	F	df	p
General Curriculum	3.22 (22)	3.30 (40)	3.48 (19)	3.50 (28)	1.46	3,105	0.230
Method of Teaching	2.98 (22)	2.73 (40)	2.85 (19)	3.03 (28)	<1	3,105	
Facilities	2.67 (22)	2.56 (40)	2.57 (19)	3.24 (28)	5.29	3,105	0.002*
Method of Evaluation	3.44 (21)	3.21 (40)	3.12 (19)	3.63 (28)	3.11	3,104	0.030+
Textbooks	3.20 (21)	2.97 (40)	2.73 (19)	3.45 (28)	3.58	3,104	0.016**

KEY: **EDUC** = Education; **ISL** = Islamic; **SCI** = Sciences; **ENGIN** = Engineering; **INT** = Interim; **COLL** = College; **TCH** = Teachers.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

The Scheffe pairwise comparison of the group means showed: + = no two groups to be significantly different; * = other to differ significantly from engineering and interim college for teachers; ** = .other to differ significantly from interim college for teachers.

E. Current Employment: The results (mean responses and F values) obtained from the statistical analysis of the graduates' responses to the items of each questionnaire section as a function of their current employment are reported in Table 263 below. Graduates fell into one of three types of employment: clerical work, technical work, or administrative work. No statistically significant

differences were found in the responses given to any portion of the questionnaire by graduates of the Omani educational systems as a function of the graduates current employment as either a clerical worker, technical worker, or administrator.

Table 277: Graduate response to graduate questionnaire items by current employment.

	CURRENT EMPLOYMENT					
	CLERICAL WORK $\bar{X}$ (n)	TECHNICAL WORK $\bar{X}$ (n)	ADMINISTRATIVE WORK $\bar{X}$ (n)	F	df	p
General Curriculum	3.34 (71)	3.45 (16)	3.51 (16)	<1	2,100	
Method of Teaching	2.84 (71)	2.78 (16)	3.19 (16)	1.47	2,100	0.234
Facilities	2.73 (71)	2.61 (16)	3.03 (16)	1.31	2,100	0.275
Method of Evaluation	3.37 (70)	3.11 (16)	3.56 (16)	1.80	2,99	0.171
Textbooks	3.16 (70)	2.82 (16)	3.26 (16)	1.45	2,99	0.239

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

XI. A COMPARISON BY DEMOGRAPHIC BACKGROUND OF THE RESPONSES GIVEN BY PARENTS TO THE QUESTIONNAIRE.

One hundred parents were sampled and assessed on their general satisfaction with the Omani secondary school system. The nature of their questionnaire and the typical response patterns have been discussed earlier (see section II. descriptive analysis this chapter). The parents responses

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to the questionnaire items were assessed in light of ten non-manipulated independent variables: gender, nationality, district (in which their children go to school), educational level, number of children, the grade level of their child, the number of their children who finished the secondary school before 1981, the way through which the parent knew about the curriculum, and whether or not they attended Parent-Teacher meeting. The number of parents falling into each response category of each independent variable are reported in Tables 278 through 287 below.

Table 278: Sample of parents by gender.

	GENDER	
	Male	Female
	86	7

Table 279: Sample of parents by nationality.

	NATIONALITY	
	Omani	non-Omani
	77	14

Table 280: Sample of parents by school district.

	DISTRICT								
	Musc	Bati	Rous	Dhak	Shar	Wous	Dhah	Jano	Musa
	19	9	5	13	11	10	13	17	3

Table 281: Sample of parents by level of education.

EDUCATIONAL PREPARATION					
UNIV GRAD	SECONDARY SCHOOL GRAD	ATTENDED SECONDARY SCHOOL	PREP SCHOOL GRAD	ATTENDED PREP SCHOOL	PRIMARY SCHOOL GRAD
38	0	24	9	4	13

Table 282: Sample of parents by number of children currently in secondary school.

NUMBER OF CHILDREN						
one	two	three	four	five	six	> six
41	26	5	0	2	1	12

Table 283: Sample of parents by grade level of children currently in secondary school.

GRADE LEVEL		
one	two	three
18	14	29

Table 284: Sample of parents by whether they have children who finished secondary school prior to 1987.

YES	NO
13	71

Table 285: Sample of parents by whether they know about the new curriculum.

YES	NO
64	20

Table 286: Sample of parents by source of knowledge of new Omani curriculum.

SOURCE				
ask	friend	teacher	media	children
16	11	10	20	17

Table 287: Sample of parents by attendance at parent-teacher meetings.

ALWAYS	SOMETIMES	NEVER
40	28	10

In addition, the results from the one-way ANOVA analyses assessing the effect of each of these variables on the parents response to the parents questionnaire are reported in Tables 288 through 297. No statistically significant differences were found in the responses parents gave to the parents questionnaire as a function of any independent variable. The mean responses given by parents, regardless of demographic background, fell at or very near 3.0 a rather ambiguous response, suggesting that they were neither satisfied or dissatisfied with the Omani educational system at the Secondary school level.

Table 288: Parent response to parent questionnaire items by gender.

GENDER				
Male $\bar{X}$ (n)	Female $\bar{X}$ (n)	F	df	p
3.16 (84)	2.92 (7)	1.22	1,89	0.272

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 289: Parent response to parent questionnaire items by nationality.

NATIONALITY				
Omani $\bar{X}$ (n)	non-Omani $\bar{X}$ (n)	F	df	p
3.20 (75)	2.88 (14)	3.85	1,87	0.053

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 290: Parent response to parent questionnaire items by school district.

DISTRICT											
Musc $\bar{X}$ (n)	Bati $\bar{X}$ (n)	Rous $\bar{X}$ (n)	Dhak $\bar{X}$ (n)	Shar $\bar{X}$ (n)	Wous $\bar{X}$ (n)	Dhah $\bar{X}$ (n)	Jano $\bar{X}$ (n)	Musa $\bar{X}$ (n)	F	df	p
3.01 (13)	3.23 (9)	3.54 (5)	3.19 (13)	3.37 (9)	2.94 (10)	3.32 (13)	2.98 (17)	2.99 (3)	1.18	8,89	0.320

KEY: **Musc** = Muscat; **Bati** = Batinah; **Rous** = Roustaq; **Dhak** = Dakhilyah; **Shar** = Sharqiyah; **Wous** = Wousta; **Dhah** = Dhahirah; **Jano** = Janoubiyah; **Musa** = Musandam

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 291: Parent response to parent questionnaire items by level of education.

EDUCATIONAL PREPARATION								
UNIV GRAD	SECOND SCHOOL GRAD	ATTD SECOND SCHOOL	PREP SCHOOL GRAD	ATTD PREP SCHOOL	PRIM SCHOOL GRAD	F	df	p
X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)			
3.07 (38)	---- (0)	3.34 (24)	3.10 (8)	3.30 (4)	3.30 (12)	<1	4,81	

KEY: UNIV = university; GRAD = graduate; SECOND = secondary; ATTD = attended; PREP = prepatory; PRIM = primary.

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 292: Parent response to parent questionnaire items by number of children.

NUMBER OF CHILDREN									
one	two	three	four	five	six	>six	F	df	p
X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)	X̄ (n)			
3.19 (41)	3.18 (26)	3.11 (5)	---- (0)	2.27 (1)	3.85 (1)	3.00 (11)	1.03	5,79	0.404

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 293: Parent response to parent questionnaire items by grade level of children currently in secondary school.

GRADE LEVEL					
ONE	TWO	THREE	F	df	p
X̄ (n)	X̄ (n)	X̄ (n)			
3.08 (18)	3.22 (14)	3.15 (28)	<1	2,57	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 294: Parent response to parent questionnaire items by whether they have children who finished secondary school prior to 1987.

CHILDREN FINISHING SCHOOL BEFORE 1987				
YES $\bar{X}$ (n)	NO $\bar{X}$ (n)	F	df	p
3.13 (13)	3.14 (69)	<1	1,80	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 295: Parent response to parent questionnaire items by whether they know about the new curriculum.

KNOW ABOUT NEW CURRICULUM				
YES $\bar{X}$ (n)	NO $\bar{X}$ (n)	F	df	p
3.12 (63)	3.17 (19)	<1	1,80	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 296: Parent response to parent questionnaire items by source of knowledge of new Omani curriculum.

SOURCE							
ask $\bar{X}$ (n)	friend $\bar{X}$ (n)	teacher $\bar{X}$ (n)	media $\bar{X}$ (n)	children $\bar{X}$ (n)	F	df	p
2.99 (16)	3.21 (11)	3.15 (10)	3.22 (20)	3.23 (16)	<1	4,68	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

Table 297: Parent response to parent questionnaire items by frequency of attendance at parent-teacher meetings.

ATTENDANCE					
always $\bar{X}$ (n)	sometimes $\bar{X}$ (n)	never $\bar{X}$ (n)	F	df	p
3.17 (40)	3.02 (28)	3.04 (9)	<1	2,74	

Statistical analyses performed only in cases where the number of subjects was five (5) or more in at least two levels of the independent variable.

KEY TO THE CHARTS

The following symbols are used to denote the various results of the analysis of the three groups of educators' responses to the questionnaire as a function of the denographic, academic and attitudinal independent variables.

* A star means the analysis yeilded a significant difference.

*▭ A star and a small rectangle means the analysis yeilded a significant difference and significantly different levels or groups could be isolated and are listed inside the rectangle (using the symbols in this Key).

— A dash in a cell means that the analysis did not show any significant differences.

A crossed out cell means that the analysis could not be conducted because the number of subjects in at least two of the levels of the independent variable was less than five (which is the minimum number to warrant reliable statistical results).

Levels (and the symbols representing them) of the independent variables used in this study.

1- Gender Male ♂ Female ♀

2- Nationality Omani O Non-Omani no

3- District of Employment

Muscat	a	Dhahira	b
Batina	c	Dakhiliya	d
Sharqiya	e	Janoubiya	f
Wousta	g	Musandam	h
Roustaq	i		

4- Years of teaching experience

1 - 3 years	a	4 - 6 years	b
7 -10 years	c	Over 10 years	d

5- Number of Workshops

No workshops	0	Three workshops	3
One workshop	1	More than three workshops	3+
Two workshops	2		

6- Educational Qualifications

University degree with ed	a
University degree without ed	b
Less than a University degree	c

7- Length of In-service Training

No In-service training	0
1 - 3 months	a
4 - 12 months	b
1 - 2 years	c

8- Location of In-service training

Inside Oman	in	Outside Oman	out

9- Levels of Importance of the Factors

High	H	Medium	M	Low	L

Chart 1

Summary of the analysis of the teachers Responses to questionnaire Sections

Variable & Questionnaire Section / Teachers Group.	Factors I	II	III	IV	V	Gender	Nationality
Omani Ed. Objectives							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M	—	no>o
Arts	H>M	H>M	H>M	H>M	H>M	—	—
Sciences	H>M	H>M	H>M	H>M	H>M	—	no>o
Teaching Methods							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M	—	no>o
Arts	H>M	H>M	H>M	H>M	H>M	—	—
Sciences	—	H>M	H>M	H>M	H>M	—	—
Student Assessment							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M	—	—
Arts	H>M	H>M	H>M	H>M	H>M	—	—
Sciences	H>M	H>M	H>M	H>M	H>M	♀>♂	—
Staff							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M	—	no>o
Arts	H>M	H>M	H>M	H>M	H>M	—	—
Sciences	—	H>M	H>M	H>M	H>M	—	—
Facilities							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M	—	no>o
Arts	—	H>M	H>M	H>M	H>M	—	—
Sciences	—	H>M	—	H>M	H>M	—	—
Text Book							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M	—	no>o
Arts	H>M	H>M	H>M	H>M	H>M	—	—
Sciences	H>M	H>M	H>M	H>M	H>M	—	—

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School district	Educational Preparation	In service Training	Location of In Service Training	No of Work Shops	No. of Yrs in Teaching	No of Yrs Teaching in each
c,b,e>f	a.b>c	0,a>b.c	out>in	1>3+	—	a,b,c>d
*	—	—	—	—	—	—
*	a,b>c	0.a.>b	—	—	—	*
b>f	a,b>c	0,a>c	—	1>3+	—	*
b>c.i.g	—	a.b.c>0	—	—	—	—
F>g	a>c	—	—	*	—	—
a.b c.e>f	a.b>c	0.a>c	—	1>3+	—	a>c.d
b>g.	—	—	—	—	—	—
f>g	a.b>c	*	—	2>0	—	—
b>i	—	a>c	—	—	—	—
b>c	—	—	—	3>1	—	—
*	*	—	—	2>0	—	—
b>g	—	*	—	—	—	—
b>1.c f.a>c	—	—	—	3>1	—	—
F>g.c	—	—	—	2>0,3+	—	a>b
*	b>c	a.a>c	out>in	—	—	a,b,c>d
—	—	—	—	—	—	—
*	a>c	—	—	2>0	*	—

Chart 1 Continued

Variables / Questionnaire Section, Teachers group	Factors I	II	III	IV	V	Gender	Nationality
Teachers Manual Shared Subject Matters.	* H>M	* H>M	* H>M	* H>M	* H>M	—	* n○>○
Arts	* H>M	* H>M	* H>M	* H>M	* H>M	—	* n○>○
Sciences	—	* H>M	—	* H>M	* H>M	—	—
Process of Curr. Development Shared Subject Matter	—	* H>M	* H>M	—	* H>M	—	—
Arts	* H>M	* H>M	* H>M	* H>M	* H>M	—	—
Sciences	—	* H>M	* H>M	* H>M	—	—	—
Subject Matter areas Islamic Education	* H>M	* H>M	* H>M	* H>M	* H>M	—	—
Arabic Language	* H>M	* H>M	* H>M	* H>M	* H>M		* n○>○
English Language	—	—	* H>M	—	* H>M	—	—
Human Cultures	* H>M	* H>M	* H>M	* H>M	* H>M	—	☒
Mathematics General Items.	—	* H>M	—	—	* H>M	—	* ○>n○
Math. Construction	—	* H>M	—	* H>M	—	—	—
Math procedure	—	* H>M	—	—	—	—	—
Learning & Teaching	—	* H>M					* ○>n○
1st. Grade content	—	* H>M	* H>M	* H>M	—	—	—
2nd Grade Sciences Content	—	* H>M	* H>M	* H>M	—	—	—
3rd Grade Science Content	* H>M	* H>M	—	* H>M	* H>M	—	* n○>○
2nd Grade Arts Content	* H>M	—	—	—	—	* ♀>♂	—
3rd Grade Arts Content	—	—	—	* H>M	—	—	—
General Sciences General Items	* H>M	* H>M	* H>M	* H>M	* H>M	—	☒
Sciences & Scientists	—	—	—	—	—	—	☒

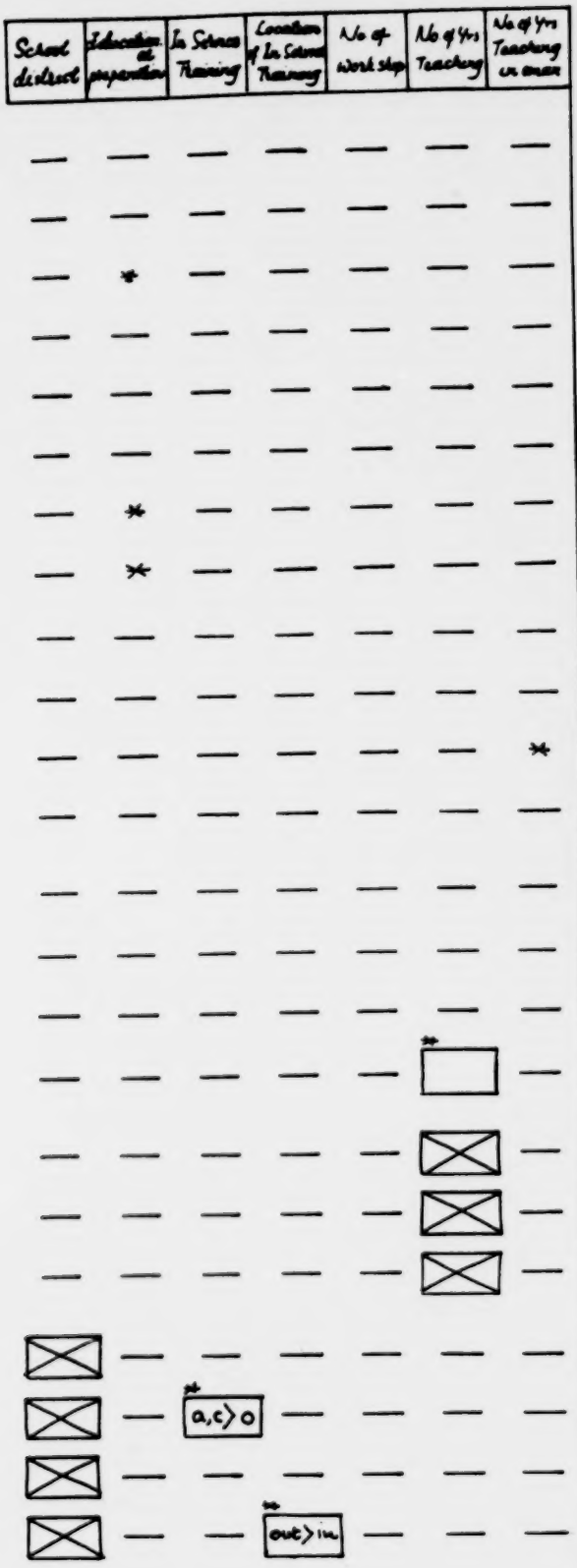
School District	Educational preparation	In Service Training	location of In Service Training	No. of Work Shops	No of Yrs teaching	No of Yrs Teaching in Omaha
*	—	a>c	—	—	—	—
a, b>d b>1	—	—	—	—	—	—
*	—	—	—	—	b>c	*
b>F	—	—	—	—	—	—
b>g, i has d	—	—	—	—	—	—
b>a	—	—	—	—	—	a>b
c, a>b C>i	a, b>c	o, a>b	out>in	1>3+	—	a, b>d
g>a	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	☒	—
*	—	—	—	+3>0	—	—
*	—	—	—	—	—	—
*	—	—	—	*	—	—
*	—	—	—	*	—	—
f>a	—	—	—	—	—	—
*	—	—	—	—	—	—
*	a, b ∄ c	—	—	—	a, c, d>a	
—	—	—	—	—	—	—
—	—	—	—	—	—	—
☒	—	—	—	—	—	☒
☒	—	*	—	—	—	☒

Chart I Continued

Variables / Questionnaire Sections / Teachers Ratings	Factors I	II	III	IV	V	Grades	Arithmetic
General Sciences (Cont.)							
Evolution of Astronomy	—	H>M	—	—	—	—	☒
Transportation	—	H>M	—	H>M	—	—	☒
Health	—	—	—	H>M	—	—	☒
Science & Food	H>M	H>M	H>M	H>M	H>M	—	☒
Oil	—	H>M	—	H>M	—	—	☒
Solar Energy	—	H>M	—	H>M	—	—	☒
Nuclear Energy	—	H>M	—	H>M	—	—	☒
Environment & pollution	—	H>M	—	H>M	—	—	☒
Climate & Forecasting	—	H>M	—	—	—	—	☒
New Concepts in 2nd grade			—	—	—	—	☒
New Concepts in 3rd grade	—	—	—	—	—	—	☒
Arrows / General Science	—	H>M	—	—	H>M	—	☒
1st Grade Unit (1)	—	—	—	—	—	—	☒
1st grade Unit (2)	—	—	—	H>M	—	—	☒
1st grade Unit (3)	—	H>M	—	H>M	H>M	—	☒
2nd Grade Unit (1)	—	—	—	—	—	—	☒
2nd Grade Unit (2)	—	—	—	—	—	—	☒
2nd Grade Unit (3)	—	—	—	—	—	—	☒
3rd Grade Unit (1)	H>M	H>M	—	H>M	H>M	—	☒
3rd grade Unit (2)	—	—	—	H>M	H>M		☒
3rd Grade Unit (3)	—	H>M	—	—	H>M	—	☒
Chemistry / General Science	—	—	—	—	—	—	☒
1st Grade Unit (1)	—	H>M	—	—	—	♂ ♀	☒
1st Grade Unit (2.4)	—	—	—	—	—	—	☒
1st Grade Unit (7)	—	H>M	—	—	—	—	☒
2nd Grade Unit (1)	—	—	—	—	—	—	☒
2nd Grade Unit (2)	—	—	—	H>M	—	—	☒
2nd Grade Unit (3.4)	—	—	—	—	—	—	☒
3rd Grade Unit (1.2)	—	—	—	—	—	—	☒
3rd Grade Unit (3)	—	—	—	—	—	—	☒
3rd Grade Unit (5.6)	—	—	—	—	—	—	☒
3rd Grade Unit (7)	—	—	—	—	—	—	☒

Chart 1 Continued

Variables / Questionnaire Section Teacher Group	Factors I	II	III	IV	V	Gender	University
Biology 1st Grade Unit (1)	—	H>M*	H>M*	H>M*	H>M*	—	☒
1st Grade Unit (2)	—	—	—	—	—		☒
1st Grade Unit (3)	—	H>M*	—	—	—	—	☒
1st Grade Unit (4)	—	—	H>M*	—	H>M*		☒
1st Grade Unit (5)	—	—	H>M*	—	H>M*	—	☒
2nd Grade Unit (1)	—	—	—	—	—	—	☒
2nd Grade Unit (2)	—	—	—	—	—	—	☒
2nd Grade Unit (3)	—	—	—	—	—	—	☒
3rd Grade Unit (1)	—	—	H>M*	—	—	—	☒
3rd Grade Unit (2)	—	—	H>M*	—	H>M*	—	☒
3rd Grade Unit (3)	—	—	—	—	—	—	☒
3rd Grade Unit (4)	—	—	—	—	—	—	☒
Geography General Items	H>M*	—	H>M*	B>M*	—	—	—
2nd Grade	H>M*	—	H>M*	H>M*	H>M*	—	—
3rd Grade	H>M*	—	—	—	—	—	—
Unit for Science division	—	H>M*	H>M*	—	—	—	—
History General Items	H>M*	H>M*	H>M*	H>M*	H>M*	—	☒
2nd Grade	H>M*	H>M*	—	H>M*	H>M*	—	☒
3rd Grade	H>M*	H>M*	H>M*	H>M*	H>M*	—	☒
Civic Education General Items	H>M*	H>M*	H>M*	H>M*	—	—	☒
1st Grade	H>M*	H>M*	H>M*	H>M*	—	—	☒
2nd Grade	H>M*	—	H>M*	H>M*	—	—	☒
3rd Grade	H>M*	—	H>M*	H>M*	—	—	☒


School district
Education & preparation
In Service Training
Location of In Service Training
No of work shop
No of Yrs Teaching
No of Yrs Teaching in area
a,c > o
out > in

Summary of the analysis of Supervisors responses to the Questionnaire Section

Variable / Supervisors Group	Factors I	II	III	IV	V	Gender	Nationality
Primary Educational Objectives							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M		
Islamic Education	M>L						
Arts		H>M	H>M	H>M	H>M		
Sciences	H>M	H>M	H>M	H>M	H>M		
Methods of Teaching							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M		
Islamic Education	—						
Arts		—	—	—	H>M		
Sciences	—	—	—	H>M	—		
Student Assessment							
Shared Subject Matters	H>M	H>M	H>M	H>M	H>M		
Islamic Education	—						
Arts		—	—				
Sciences	—	—	—	—	—		
Staff							
Shared Subject Matters	H>M	—	—	H>M	—		
Islamic Education	—						
Arts		—	—	—	—		
Science	—	—	—	—	—		
Facilities							
Shared Subject matters	H>M	—	H>M	H>M	—		
Islamic Education	—						
Arts		—	—	—	—		
Sciences	H>M			H>M	—		
Text Books							
Shared Subjects Matters	H>M	*	—	H>M	—		
Islamic Education	—						
Arts		H>M	H>M	H>M	H>M		
Sciences	H>M	—	—	H>M	—		
Teachers Manual							
Shared Subject Matters	H>M	*	H>M	H>M	—		
Islamic Education	—						
Arts		H>M	—	H>M	—		
Sciences	—	—	—	H>M	—		

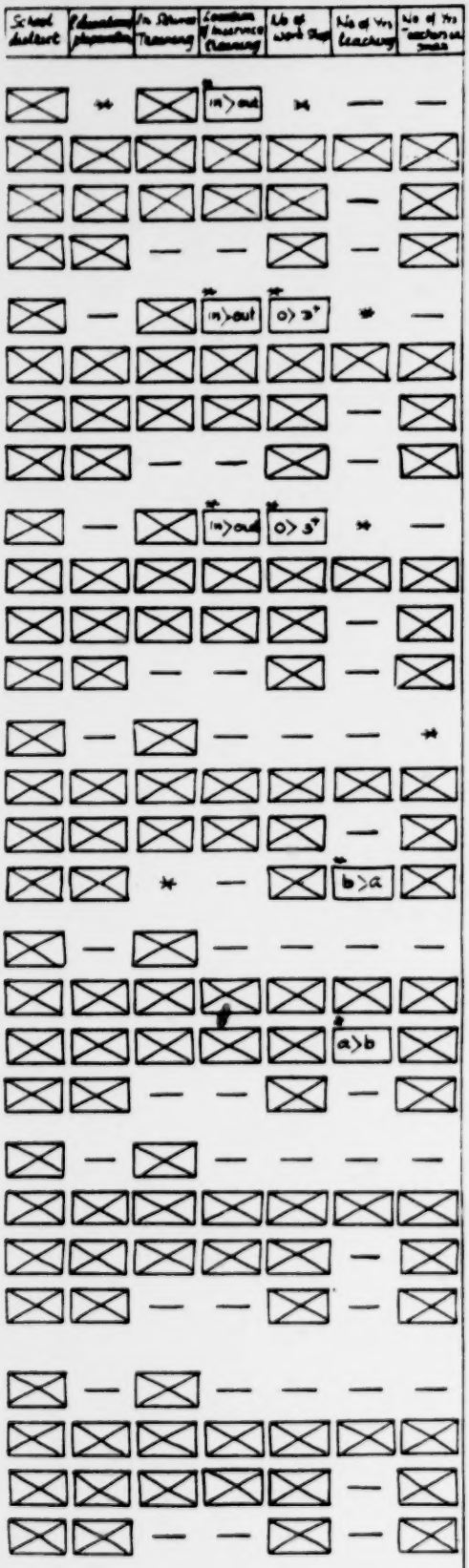

in>out
o> s'
in>out
o> s'
b>a
a>b

Chart (2) Continued

Variables	Factors					Gender	Nationality
Questionnaire Section Supervisor Group	I	II	III	IV	V		
Process of Cur. Dev.	*		*	*	*		
Shared Subject Matters	H>M	*	H>M	H>M	H>M	☒	☒
Islamic Education	—	☒	☒	☒	☒	☒	☒
Arts	☒	—	—	—	—	☒	☒
Sciences	—	—	—	—	—	☒	☒

Chart (3)

Summary of the analysis of Administrator Responses to the questionnaire Section

Variables	Factors					Gender	Nationality
Questionnaire Section							
Omani Ed. Objcetives	* H>M	* H>M	* H>M	* H>M	* H>M	—	—
Methods of Teaching	—	* H>M	* H>M	* H>M	* H>M	* ♀>♂	—
Student assessment	—	* H>M	—	* H>M	—	* ♀>♂	—
Staff	—	* H>M	—	* H>M	* H>M	* ♀>♂	—
Facilities	—	* H>M	—	* H>M	* H>M	* ♀>♂	* no>o

School district	Educational preparation	in Service Training	Location of in-service Training	No. of work Shops	No. of Yrs Teaching	No. of Yrs Teaching in Oman
[X]	*	[X]	* in > out	* o > 3+	* a > b,c	—
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	—	[X]
[X]	[X]	—	—	[X]	—	[X]

School District	Educational Preparation	In Service Training	Location of In Service Training	No. of work Shop
* b,h > e	—	—	—	—
*	—	—	—	—
*	—	—	—	—
—	—	—	—	—
*	—	—	—	—

XII. A MULTIPLE REGRESSION (STEPWISE) ANALYSIS OF THE IMPACT OF EACH SIGNIFICANT DEMOGRAPHIC, ACADEMIC, AND TEACHING BACKGROUND VARIABLES ON THE RESPONSES GIVEN BY EDUCATORS ON EACH QUESTIONNAIRE SECTION

Several stepwise multiple regression analyses were performed after completing the analysis, by one-way ANOVA, of the teachers, supervisors, and administrators pattern of responses to the questionnaire as a function of their demographic, academic, and teaching background. The intent of this post-hoc analysis was to determine in those cases in which multiple demographic and academic variables were found to statistically differentiate the subjects' responses, if each of these variables captured a unique portion of the variability of the responses. A multiple regression analysis was used to explore how much variability could be accounted for by a single independent variable. Or, to assess to what extent the addition of multiple independent variables significantly enhanced the interpretation of the subjects' responses.

The summary charts presented in the preceeding pages display the results from every independent variable by dependent variable comparison performed by one-way ANOVA for teachers (Chart 1), supervisors (Chart 2), and administrators (Chart 3). As these charts indicate many independent variables were found to differentiate the responses given by the teacher groups. For example, the responses given to Omani educational objectives items by teachers of the shared subject matters were statistically

differentiated by the six variables (Nationality, District of Employment, Educational Preparation, Amount of In-service Training, Teaching experience in Oman, and Location of In-service training). This pattern of results was not typical of the supervisors and administrators. In fact, only a few independent variables were found to differentiate the supervisors' in the shared subject matters responses, and only one variable (gender) systematically differentiated the responses given by administrators.

A regression analysis was performed on those cases in which 2 or more independent variables were found to differentiate a group of subjects' responses to the questionnaire. The interpretation of the results from the regression analysis is limited to identifying whether or not single or multiple variable(s) account for the variability in responses. The inclusion of independent variables in each regression analysis was based soley on whether they statistically differentiated the subjects' responses to the questionnaire (by section), and since no priority of independent variables was preset, a stepwise type of multiple regression analysis was chosen. In this type of analysis, the point at which a variable is included into the regression equation is determined by purely statistical procedures (Tabachnick and Fidell, 1989).

A stepwise multiple regression analysis was performed for every subject group by questionnaire section (exept

curriculum content) combination in which the one-way ANOVA found multiple independent variables to statistically differentiate the responses1. The specific combination of independent variables and dependent variables assess by each regression analysis and the results obtained for teachers of the shared subject matters group are given in Table 298 below. The results from these data are exemplar and add to the interpretation of the ANOVA.

The responses given by teachers of the shared subject matters to theory, process and practice, and resources sections of the questionnaire were statistically differentiated by at least three independent variables and in every regression analysis, two or more independent variables added significantly to the regression.

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1 Variable coding followed the scheme developed for the ANOVA with one exception, district of employment. In the regression analysis, district of employment was recoded into three groups. Each of two groups contained the subjects from districts that were at one or the other end of the range of response distribution and that differed significantly by ANOVA. The third group contained all subjects from districts that did not differ significantly from any either end of the distribution. The recoding of district of employment was necessary from a procedural standpoint and was designed to emphasis statistically different groups of districts.

Table 298: Multiple Regression Analysis: Teachers of the Shared Subject Matters Case

Step	Variable Entered	R	R^2	sr^2	$T_{s.e}$	$p_{s.e}$
	IC: Omani Educational Objectives					
1	Amt In-ser Train	.40	.16	.16	-7.74	<0.001*
2	Teach/Oman	.48	.23	.07	-5.49	<0.001*
3	Nationality	.51	.25	.03	3.46	0.001*
4	Education Prep	.52	.28	.01	-2.68	0.008*
NE = District, Location of In-serice Training						
	IIB1: Methods of Instruction					
1	Amt In-ser Train	.26	.07	.07	-4.76	<0.001*
2	Nationality	.31	.09	.09	-3.05	0.003*
NE = Education Prep, District, Workshop Attendance						
	IIB2: Student Assessment Techniques					
1	Amt In-ser Train	.40	.16	.16	-7.67	<0.001*
2	Teach/Oman	.44	.20	.04	-3.94	<0.001*
3	Dist	.34	.11	.02	-2.62	0.009*
NE = Education Prep and Workshop Attendance						
	IC1: Staff					
1	Amt In-ser Train	.18	.03	.03	-3.18	0.002*
2	Nationality	.24	.05	.03	2.96	0.003*
3	District	.27	.07	.04	-2.31	0.022*
	IIC2: Facilities, Equipment, and Materials					
1	Nationality	.19	.03	.03	3.35	0.001*
2	District	.23	.05	.02	-2.35	0.020*
	IID: Textbooks					
1	Amt In-ser Train	.26	.06	.06	-3.35	<0.001*
2	Nationality	.32	.10	.04	3.84	<0.001*
3	Teach/Oman	.36	.13	.03	-2.89	0.004*
NE = Education Prep, Location of In-service Training						
	IIE: Teachers' Manual					
1	Amt In-ser Train	.20	.04	.04	-3.53	0.001*
2	Nationality	.25	.06	.02	2.61	0.009*

Abbreviations: Am In-ser Train = Amount of in-service trainig; Teach/Oman = years teaching in Oman; Education Prep = educational preparation.

sr^2 = unique variability * = statistically significant contribution to the regression equation (sr^2 increased significantly)

$T_{s.e}$ = gives the statistically significant contribution of the variable as it enters the regression equation. Analysis of regression F_R (not reported) is statistically significant at each step.

NE = 'not entered' = Variables that produced statistically significant ANOVA, but did not contribute in a statistically significant way to the regression equation and thus did not enter the equation.

Chapter 6
SUMMARY AND DISCUSSION

The main focus of this chapter lies in the discussion and interpretation of the results in light of the general research questions given at the end of chapter 4 (pages 129-134).

Two levels of analysis were performed on the responses given to the questionnaire. First, a descriptive analysis was used to provide the overall pattern of response to items within each section of the questionnaire. In this analysis, the frequency and range of responses to questionnaire items in each section were provided for each sample of subjects, teachers and supervisors (by subject matter area), administrators, students (by section of study), graduates, and parents. Second, a parametric analysis evaluating the extent that the mean responses to each section of the questionnaire were influenced by a several non-manipulated demographic, academic, occupational and in some samples, attitudinal independent variables. In a follow-up of the parametric analyses, a multiple stepwise regression analysis was used to identify which independent variable(s), if any, best predicted the pattern of responses given to the questionnaire by teachers, supervisors, and administrators.

Each level of analysis provides a unique view of the subjects responses given to the questionnaire. The perspective provided by the descriptive analysis is on the

responses to items within each section of the questionnaire, while the perspective provided by the parametric analysis is on the mean responses to entire sections of the questionnaire. To evaluate the progress made in the implementation of the Omani curriculum, as assessed by this questionnaire developed for this purpose, both levels of analysis are used as reference.

Each item of the questionnaire was designed to assess how well the various sample groups thought the current curriculum in Omani compared to the intended curriculum put forth by its designers. To do this, questionnaire items were developed to reflect the designers' intentions for the Omani educational objectives, methods of instruction, student assessment techniques, staff, facilities, equipment, and materials, textbooks, teachers' manual, and the specific curriculum content in each subject matter. In addition, items in one section of the educators questionnaire assessed matters general to the implementation of a new curriculum. Teachers, supervisors, administrators, students, graduates, and parents rated how well they thought the current curriculum coincided with the questionnaire item (using a 5 point Likert type scale). Thus, on an item-by-item basis, the mean response or most frequent response by each sample represents the extent that the sample found consistency between the designers' intentions and current curriculum, and thus is a measure of the success in implementation of

be positively related to his response to other aspects of the curriculum if these aspects of the curriculum reflected the concrete application of the concept specified by the Factor.

To explain the variation in the mean responses of the subjects to the same sections of the questionnaire, the effect of a variety of demographic and academic variables on the subjects responses was also assessed. The purpose of these analyses was to determine whether or not the subjects' background (academic, demographic or occupational) significantly altered their view and perhaps the actual process of curriculum implementation. The teachers, supervisors, and administrators responses were assessed in light of their demographic background (gender, nationality, district of employment), academic background (educational preparation, amount of in-service training, location of in-service training, and workshop attendance), and in the teacher and supervisor case, teaching experience (years teaching in total, years teaching in Oman). Student responses to the student questionnaire were assessed in light of the students' demographic background (gender, nationality, school district) and by their section of study (Arts or Sciences). Graduate responses to the graduate questionnaire were assessed in light of the graduates' demographic background (gender, nationality, previous school district, occupation) and educational background (type of

specific aspects of the Omani curriculum. The evaluation of the mean responses given to whole sections of the questionnaire by each sample assess the level of satisfaction with general aspects of the curriculum, including Omani objectives, classroom practices, resources, and the specific curriculum content. Since the items reflect the intended application of the new curriculum, the level of satisfaction given to these items reflects the successful implementation of the Omani curriculum.

A second method used to assess the success of the Omani curriculum implementation was to compare how well the subjects attitude toward 5 educational concepts related to the responses they gave to the questionnaire. The five educational concepts reflect the basic educational philosophy underlying the Omani curriculum. Thus, a strongly positive relationship between a subjects' attitude toward a concept and their response to each aspect of the curriculum was expected if (a) the subjects' attitude conformed to the intention of its designers and (b) the curriculum reflected the concept that the designers' intended. These five concepts, referred to here as a Factors, provided the five attitudinal independent variables. The subject's responses to these factors were characterized as either high in agreement, in agreement, or in disagreement with the intentions of the designers. It was expected that the subjects' response to a Factor should

continuing education). Finally, parent responses to the parent questionnaire were assessed in light of the parents' demographic background (gender, nationality, school district, number of children in Secondary school, grade level of children in secondary school, and number of children graduating from secondary school before 1981), educational preparation, curriculum information background (if they knew about the new curriculum and if so, how they knew about it), and level of participation in the child's' education (if they attend parent-teacher meetings).

Four questionnaires were developed to assess the 6 sample groups (teachers, supervisors, administrators, students, graduates, and parents). The questionnaire designed for the educators (teachers, supervisors, and administrators) was composed of four major parts that assessed their satisfaction with the implementation of the new Omani curriculum: Theory (opinion on five concepts of educational philosophy and the Omani educational objectives); Process and Practice (methods of instruction and student assessment techniques); Resources (staff, facilities, materials, and equipment, textbooks, and the teacher's manual); and Curriculum content (process of curriculum development; specific curriculum content in the 12 subject matter areas at the secondary school level). Teachers and supervisors were asked to respond to all questionnaire items, while, administrators were asked to

respond to only those items addressing theory, process and practice, and human and physical resources (staff, facilities, equipment, and materials). Students were sampled so that an equal representation from the Arts and Sciences sections were gathered.

Students (one half Arts students and the other half Sciences students) responded to one of two questionnaires that addressed either the curriculum, its content and implementation, or the textbooks. The first questionnaire addressing the curriculum assessed the students satisfaction with the implementation and success of the methods of teaching, student evaluation, facilities, and curriculum content. Arts students and Science students received different questionnaire items on the curriculum content, each addressing the content specific to their section of study. Consequently, the specific items on Curriculum Content differed between Arts and Science students, with the exception of the Curriculum Content items called Shared Subject Matters (Islamic Education, Arabic Language, English Language). Arts and Science students responding to the textbook questionnaire answered only those items that addressed textbooks that they used.

The graduate questionnaire was modeled after the student questionnaire and addressed five areas: teaching methods, student evaluations, textbooks, materials and facilities, and general curriculum content.

The parent questionnaire assessed a variety of topics including (a) the level of awareness parents have toward the content of their children's education, (b) the level of satisfaction parents have toward their child's secondary school education, and (c) the level of participation parents have in the school district.

Differences in the responses given to questionnaire sections as a function of the demographic, academic, or occupational background of the subjects is discussed first. A complete explanation of the source of information used to segregate subjects by a specific demographic, academic, and occupational variable as well as the method by which subgroups of the samples was determined is given in chapter 5 (see pages 241-244). In all parametric analyses teacher and supervisor samples were subdivided by the general area of instruction.

I. TEACHER, SUPERVISOR, AND ADMINISTRATOR RESPONSE TO THEORY, PROCESS AND PRACTICE, AND RESOURCE QUESTIONNAIRE ITEMS WAS INFLUENCED BY THEIR DEMOGRAPHIC, ACADEMIC AND/OR TEACHING BACKGROUND

The effect of each demographic, academic, and teaching experience variable on the responses given by teachers, supervisors, or administrators was assessed by comparing the responses given to a specific section of the questionnaire by subjects (from one sample) divided by the levels of a particular independent variable. For example, statistically comparing the responses given by administrators (one

sample), grouped by educational preparation (one variable with 3 levels - college/university degree in education, college/university degree outside of education, and other), to questionnaire items addressing the adequacy of the staff resource (a specific section of the questionnaire). The results from each comparison are summarized and discussed below by variable. Recommendations are given within the text when warranted.

A. Gender

Among teachers, gender did not differentiate the responses given to either theory (educational objectives items) or resources (staff, facilities, textbooks, or teachers' manual items) sections of the questionnaire and did not in most cases differentiate the responses given to process and practice (method of instruction and student assessment technique items) or curriculum content (process of curriculum development or specific curriculum content items) sections of the questionnaire.. In fact a significant effect of gender was limited to only two cases. First, in response to student assessment techniques items (males 3.67 and females 3.78). Second, the mathematics teachers responses to the mathematics curriculum content items, specifically to those items that assessed math concepts taught in the second grade arts section (males = 3.15 and females = 3.63).

The very limited effect of gender on teacher response to any portion of the questionnaire supports a conclusion that gender does not influence the teachers' view of the success of the process of implementation of the Omani curriculum. Since no effect of gender was expected, in that the design of the curriculum was not intended to affect males and females differentially, these results argue for the positive integration and successful implementation of the Omani curriculum by teachers of both sexes.

An insufficient number of female supervisors (shared subject matters, n = 4, Islamic Education, n = 0, of the arts, n=3, and of the sciences, n=2) was available in the sample to properly assess the effect of gender on supervisors response to the questionnaire. If the number of female supervisors increases in the future, an evaluation of the influence of gender on the integration and implementation of the Omani curriculum may be warranted.

A strikingly different pattern of responses as a function of gender were found among administrators, who gave significantly different responses to process and practice (methods of teaching and student assessment techniques items) and resources (staff and facilities items) sections of the questionnaire depending on whether they were male or female. In each case, female administrators reported greater satisfaction with the process and practice as well as the human and physical resources in the Omani curriculum

than male administrators. The qualitative interpretation of such a widespread effect suggests that satisfaction with the curriculum overall is greater among female administrators, regardless of topic (i.e. methods of instruction, staff, textbooks...). The one exception fell to the responses given by male and female administrators to Omani educational objectives items which did not differ statistically as a function of gender. However, statistical significance in this case may have been countered by the highly positive response given to these items by both male and female administrators (males = 4.06 and females = 4.13).

The significance of the effect of gender on the administrator's view of the success in the implementation of the Omani curriculum can not be interpreted based on the limited available data. Hence it is recommended that the effect of gender on the administrators' responses be further explored to determine whether these differences are a mere result of differences in attitude and expectations, or represent differences in the administrative abilities between females and males that then shows in their abilities to secure more resources and/or provide more support and guidence in the process of curriculum implementation.

B. Nationality

Among teachers of the shared subject matters, nationality statistically differentiated the responses given to theory (Omani educational objectives items) and all human

and physical resources (staff, facilities, textbooks, and teachers' manual items) sections of the questionnaire as well as to some questionnaire sections under process and practice (methods of teaching items) and curriculum content (Arabic Language items). In all cases of statistical significance, non-Omani teachers of the shared subject matters reported greater satisfaction than Omani teachers. This widespread effect of nationality suggests that there is some difference between Omani and non-Omani teachers of Islamic education, Arabic Language, and/or English language in either or both their expectation and/or vocation. These differences consequently determine their level of satisfaction with the Omani curriculum's theory, process and practice (methods of instruction only) and resources. Although the quantitative differences are typically small, the qualitative differences in at least one case were substantial, specifically, the responses given to facilities items by Omani (mean response = 2.84) and non-Omani (mean response = 3.29) nationals. No differences by nationality were found in the analysis of the responses given to student assessment technique items by teachers of the shared subject matters. Among other teacher groups, an effect of nationality was isolated in only a few cases. First, in response to teacher's manual items, teachers of the arts of non-Omani nationality (mean response = 3.24) reported statistically greater satisfaction than teachers of the arts

of Omani nationality (mean response = 2.78). Second, the responses given by the teachers of the sciences to Omani educational objectives items, differed statistically such that non-Omani nationals expressed greater satisfaction (mean response = 3.95) than the Omani nationals (mean response = 3.33). Third, differences as a function of nationality were found in the responses of the mathematics teachers to the items on the mathematics curriculum content. This effect was limited to the 'general' items, 'learning and teaching', and 'third grade concepts' of the curriculum content section, but no specific pattern of differences was isolated within the responses to the mathematics curriculum content section. Analysis could not be performed on the responses of the teachers in some of the science subject matter areas as the number of Omani nationals among these respondents was too small to warrant reliable results. The number of Omani teachers in each of these latter areas is shown in parentheses next to the area, general science (n=2), chemistry (n=4), physics (n=3), and biology (n=4). Overall among teachers of the arts and sciences, nationality had at best a minimal influence on the level of satisfaction reported for the Omani curriculum. But the nature of the effect of nationality on the responses of the teachers of shared subject matters is specific and calls for further investigation. Hence it is recommended that: First, a further study be conducted on the responses of each of the

three teacher groups that constitute the shared subject matters in this study, Islamic education, Arabic Language, and English language, in order to identify which of these three groups has been most influenced by the nationality variable in their responses and consequently level of satisfaction with the Omani curriculum. Second, a workshop should be conducted for the teachers of each group identified above to present in the clearest way possible the terminal objectives of the curriculum sought by the designers. At this workshop, teachers of both Omani and non-Omani nationality should be encouraged to express the terminal objectives as perceived by them and then discuss how to minimize the differences between the ideal and the perceived image of the objectives. The outcome of the workshop then could be used as the practical version that should be considered the basis for a successful implementation of the Omani curriculum in these subject matter areas.

No analyses were conducted on the responses of the supervisors as the number of Omani nationals among them was too small to provide reliable results. Nationality on the other hand did not affect the responses of the administrators to the various sections of the questionnaire.

C. District of Employment

Widespread significant differences in the type of responses given to the questionnaire as a function of the

subjects' district of employment were found among all teacher groups and administrators. It was not possible to assess the effect of district of employment on supervisor response to the questionnaire because too few supervisors were sampled from each district to permit a reliable statistical analysis.

The pattern of significant differences among teachers and administrators from different districts of employment varied by topic (e.g. Theory or Resources) and, among teachers, by subject group (e.g. teachers of the shared subject matters or teachers of the arts). In discussing the results, an emphasis is given to the similarities found in all one-way ANOVA using districts of employment. Thus, while the specific pattern of responses per analysis (subject group by questionnaire section) are unique, global patterns were easily identifiable by focusing on the districts in which the largest and smallest mean responses were obtained.

Among teachers of the shared subject matters, significant differences as a function of the district of employment were found in the responses given to all questionnaire sections except those addressing specific curriculum content. The pattern of responses by district was similar in the analyses of theory (Omani educational objectives items), process and practice (methods of instruction and student assessment technique items) and the

curriculum content (process of curriculum development items only) sections of the questionnaire. In these cases, teachers from Dhahirah reported the greatest level of satisfaction while teachers from Janoubiyah reported the least. The responses of teachers of the shared subject matters to staff and facilities resource sections of the questionnaire, again, found the greatest level of satisfaction among teachers in Dhahirah, while the least level of satisfaction was reported by teachers of the shared subject matters from Roustaq or Wousta. District of employment only marginally segregated the responses given by teachers of the shared subject matters to textbook and teacher's manual items, however, the trend favored the pattern found and described above for staff and facilities resource items.

In response to specific curriculum content sections in Islamic education and Arabic Language, significant differences were found as a function of the district of employment. The response given to Islamic education curriculum content items by Islamic Education teachers from Batinah was greatest (mean response 4.20) and the response by Islamic Education teachers from Janoubiyah (mean response 1.95) was the least and these two districts differed significantly. In this analysis, the range of responses is large, however the distribution can be broken into two groups. First, Islamic education teachers from Muscat (mean

response 3.85), Batinah (mean response 4.20), Dakhiliyah (mean response 3.93), Sharqiyah (mean response 3.99), Dhahirah (mean response 3.92), and Musandam (mean response 3.99) reported that they were satisfied ('greatly satisfied') with the Islamic education curriculum content, while, second, Islamic education teachers from Roustaq (mean response 2.68), Wousta (mean response 2.66), and Janoubiyah (mean response 1.95) reported that they were not satisfied ('seldom satisfied') with the Islamic education curriculum content.

Among Arabic Language teachers, a significant effect of the district of employment isolated teachers from Dhahirah (mean response 4.14) from teachers from Muscat (mean response 3.02).

Thus, among teachers of the shared subject matters those from Dhahirah consistently reported the greatest level of satisfaction, regardless of questionnaire section. The least level of satisfaction, frequently reflecting dissatisfaction, was given by teachers of the shared subject matters from (a) Janoubiyah in reference to theory or process and practice or curriculum development topics and (b) Roustaq and Wousta in reference to resources and the Islamic education curriculum content.

Among teachers of the arts, no specific differences were found in the responses given to theory (Omani educational objectives items) and most curriculum content

(specific content areas) sections of the questionnaire. In fact, the responses given to Omani educational objectives items by teachers of the arts from different districts were similar quantitatively (range of mean responses 4.03 for Dakhilyah and 4.46 for Dhahirah) and qualitatively in that all teachers of the arts agreed and even strongly agreed with the Omani educational objectives. The responses given to the process and practice (methods of instruction and student assessment technique items) sections of the questionnaire did differ significantly as a function of the district of employment, and in each case, isolated teachers of the arts from Dhahirah (greatest level of satisfaction) from teachers of the arts from Wousta (least level of satisfaction). The responses given by teachers of the arts to staff, facilities, and teacher's manual resource items and to process of curriculum development items also differed significantly as a function of the district of employment. The patterns of significant differences in each case were similar, in that the greatest level of satisfaction was found among teachers of the arts from Dhahirah and the least level of satisfaction was found among teachers of the arts from Batinah, and/or Roustaq, and/or Dakhilyah.

Thus, among teachers of the arts, those from Dhahirah consistently reported the greatest level of satisfaction, significantly greater when the topic assessed dealt with the process and practice, resources, or development of the Omani

curriculum. Teachers of the arts from Wousta, Batinah, Roustaq, and/or Dakhilyah were among those that reported the least level of satisfaction, or dissatisfaction in some cases.

Among teachers of the sciences, significant differences were found in the responses given to process and practice (methods of instruction and student assessment technique items) and to one resource (facilities) sections of the questionnaire. Teachers of the sciences from Janoubiyah consistently reported the greatest level of satisfaction, while teachers of the sciences from Wousta and Batinah reported the least level of satisfaction with process and practice and the facilities sections of the questionnaire respectively. The responses by teachers of the sciences to staff, textbook, and teacher's manual items as well as to Omani educational objectives items differed significantly as a the function of district of employment although no specific group differences were isolated by the posthoc Scheffe pairwise comparisons. The trend in the mean responses by district to staff and Omani educational objectives items were similar in pattern to the results found in the analyses of process and practice questionnaire sections, in that, teachers from Janoubiyah reported the greatest satisfaction, while teachers from Wousta reported the least.

The responses given by teachers of the sciences to curriculum content sections of the questionnaire, specifically the process of curriculum development items, differed significantly as a function of district of employment, such that teachers from Janoubiyah reported the greatest level of satisfaction, and teachers from Muscat reported the least level of satisfaction. District of employment did not differentiate the responses given to specific curriculum content items by teachers of the sciences in the subject matter areas of Chemistry, Physics, or Biology. Among Mathematics teachers, however, a statistically significant effect of district of employment was found in the responses given to all mathematics topics taught in the Sciences program. A specific group difference was isolated in the analysis of the first grade math concepts, finding mathematics teachers from Janoubiyah (greatest satisfaction) to differ from mathematics teachers from Muscat (least satisfaction). A similar trend was found in all other significant analyses within the mathematics section of the curriculum content questionnaire. The distribution of General Science teachers per district of employment was too small to permit an analysis of the effect of district of employment.

Thus, among teachers of the sciences a widespread effect of district of employment was isolated; specifically, teachers of the sciences from Janoubiyah

reported the greatest levels of satisfaction, regardless of questionnaire section. In addition, teachers from Batinah, Wousta, and Muscat were among those that reported the least level of satisfaction, although the specific district depends on the topic assessed.

Among administrators, significant differences as a function of the district of employment were found in the analyses of every section of the questionnaire, however, specific group differences were obtained only in the analysis of the Omani educational objectives items. In this analysis, administrators from Dhahirah reported the greatest level of agreement (mean response 4.50), while administrators from Sharqiyah reported the least (mean response 3.52). The trend in responses given to the other sections of the questionnaire was similar in that administrators from Dhahirah consistently reported the greatest (or equally great) level of satisfaction.

A widespread and consistent effect of district of employment among teachers of the sciences, teachers of the arts, teachers of the shared subject matters and administrators argues that a significant difference exists in the implementation of the Omani curriculum between school districts. It is recommended that additional analyses specifically designed to compare the current implementation of the Omani curriculum (ie, specific administration of programs designed to facilitate the implementation of the

Omani curriculum and/or the distribution and quantity of resources) in the nine school districts be performed. The design of such analyses should follow the leads provided in this report. Because the present analysis was able to identify specific districts or groups of districts that differed significantly (most and least satisfied), the process of additional analyses may be simplified to the analysis of differences between the specified extremes (most and least satisfied). The endpoint of such an analysis would be to determine what factors, currently specific to only a few districts (ie Dhahirah), lead to greater satisfaction, so that programs can be developed to facilitate the process of curriculum implementation in all districts.

D. Educational Preparation

Educational preparation had a significant impact on the responses given to theory (Omani educational objectives items), process and practice (methods of instruction and student assessment technique items), resource (textbook items) and specific curriculum content (Islamic education, mathematics, biology, and chemistry items) sections of the questionnaire by teachers of both the shared subject matters and the sciences. In all cases, teachers with a college degree reported greater satisfaction with the Omani curriculum than teachers with a non-college degree,

regardless of whether the college degree was in education or outside of education.

Qualitatively, the mean responses by teachers of the shared subject matters and the sciences to Omani educational objectives, methods of instruction, student assessment techniques, and textbook items suggested that those with a college-degree were far more likely to report that they were 'greatly' satisfied than those with a non-college degree. The mean responses of the latter group typically fell at 3.00 indicating that they were only 'somewhat' satisfied with these aspects of the Omani curriculum. The trend in the mean responses by teachers of the shared subject matters and the sciences to the remaining resource sections (staff, facilities, teacher's manual) was consistent (but not statistically significant) with the responses given to textbook items; college degree teachers reported greater satisfaction than non-college degree teachers.

Qualitatively, the mean responses given by Islamic education teachers suggested that while those with a college degree were near 'greatly' satisfied with the Islamic education curriculum content, those with a non-college degree were near 'seldomly' satisfied with the Islamic education curriculum content. Among Arabic language and English Language teachers, no such pattern was evident, in fact teachers with a non-college degree reported as great a level of satisfaction ('somewhat' to 'greatly' satisfied) as

teachers with a college degree. Among mathematics teachers, the mean responses to each area of the curriculum content (i.e. learning and teaching, procedures, concepts, overall program in 2nd and 3rd grades) indicated that teachers with a college degree reported greater satisfaction than teachers with a non-college degree. In fact, mathematics teachers that did not obtain a college degree typically reported that the were less than 'somewhat' satisfied with the specific curriculum content, while, mathematic teachers with a college degree tended to report that they were near 'greatly' satisfied with the specific curriculum content. The qualitative analysis and the trend of the mean responses given to the mathematics curriculum content items supported the conclusion that teachers with a college degree are more satisfied than teachers without a college degree with the Omani curriculum content. However, only a select number of items in the mathematics curriculum content proved this relationship statistically. Among teachers of the other science subject matters few had a non-college degree. The mean responses by teachers of biology and chemistry by educational preparation produced statistically significant differences in several cases, however, no specific group differences were obtained. Finally, the mean responses by teachers of biology, chemistry, and physics with a college degree to specific curriculum content in their area of specialization

qualitatively suggested that they were near 'greatly' satisfied, while the responses given by teachers in biology, chemistry, and physics that obtained a non-college degree were typically not satisfied with their curriculum, qualitatively 'sometimes' to 'seldom' satisfied. This relationship however, was not found to be statistically reliable in all cases.

No relationship between educational preparation and the responses given to any portion of the questionnaire were obtained in the analyses of the teachers of the arts, supervisors of the shared subject matters (Arabic and English language only), or administrators. Among supervisor of the arts, supervisors of the sciences, and Islamic education supervisors, all subjects (except 1 science supervisor) had obtained a non-college degree, thus no statistical comparison as a function of educational preparation was possible.

Contrary to the evidence obtained in the analysis of the teachers of the shared subject matters and the sciences, the mean responses of teachers of the arts to the theory, process and practice, or resources did not support a conclusion that educational preparation influenced their responses. In fact, the mean responses by these teachers that has obtained a non-college degree were equal to or greater than those that obtained a college degree. A similar trend is seen in the teachers of the arts response

to their specific curriculum content. Finally, among administrators, no significant differences were found as a function of educational preparation, however the distribution of administrators along this variables (college degree in education n=42, college degree n=17, other degree (n=4) permitted only a comparison between type of college degrees, and to that end, the results are consistent with all other analyses in which no differences between type of college degree were found.

A widespread influence of educational preparation was clearly found in the response profiles of teachers of the shared subject matters and teachers of the sciences. Teachers of these subject matters that had obtained a college degree reported the greatest levels of satisfaction with the theory and application (process and practice) of the Omani curriculum. Differences were not found to be specific to the type of college degree, since both college graduates trained in education and those trained in another discipline gave similar responses. Finally, the effect of educational preparation on the teachers of the shared subject matters and sciences responses to resources items was not, in all cases, statistically significant. The qualitative interpretation of the mean responses, however, supported the conclusion that educational preparation differentiated subjects responses. These results support and recommend the use of college educated teachers and

supervisors for subjects within the shared subject matters (Islamic education, Arabic Language, English Language) and the sciences (Mathematics, General Sciences, Chemistry, Physics, Biology), although the use of college educated teachers for the arts subjects does not seem necessary.

E. Amount of in-service training

A widespread influence of in-service training on level of satisfaction with the Omani curriculum was found among the teachers of the shared subject matters. Statistically significant differences to sections of the questionnaire addressing theory (Omani educational objectives items), process and practice (methods of instruction and student assessment items), resources (staff, facilities, textbooks, teacher's manual), and specific curriculum content (Islamic education) were found in the analyses of the teachers of the shared subject matters responses. Contrary to the expected results, the pattern of differences obtained in these analyses clearly found decreasing levels of satisfaction with increases amounts of in-service training. Typically, statistically significant differences were obtained between teachers that had 1 to 2 years of in-service training (least satisfied - 'somewhat' satisfied) and teachers that had less than or equal to 3 months of in-service training (most satisfied - 'greatly' satisfied). Teacher that had 4 to 12 months of in-service training invariably fell between but not statistically different from teachers with 3 months of

in-service training and teachers with 1 to 2 years of in-service training. The effect of in-service training time on the responses given by teachers of the arts, teachers in sciences, and administrators was not widespread and resulted in only the few analyzes that follow.

Among teachers of the arts, a significant effect of in-service training was found in the analyses of methods of instruction items and first grade civic education curriculum content items (assessed only by teachers of civic education). In each case and as expected, teachers with no in-service training were least satisfied and differed significantly from all other levels of in-service training (1 month to 2 years).

Among teachers of the sciences, a significant effect of in-service training was obtained in the analyses of the Omani educational objectives items and first grade unit 1 and third grade units 1 and 2 in Chemistry (assessed only by chemistry teachers). The mean responses given to Omani educational objectives items suggest that teachers of the sciences with 4 to 12 months of in-service training are least satisfied ('somewhat'), while teachers with no in-service training, 3 months or less in-service training, or 1 to 2 years of in-service training were equally and in fact 'greatly' satisfied. The pattern of responses by Chemistry teachers to the chemistry curriculum content in the 3rd grade (units 1,2 and 7) was in the desired direction, the

least level of satisfaction was found among chemistry teachers with no in-service training, however, specific group differences were not reliable.

Since it was expected that increasing in-service training should benefit the teacher, supervisor, and administrator (at least in regard to actual application of the curriculum), the results obtained here, or specifically the lack of statistically significant differences by in-service training time suggests that the in-service training program is not meeting its intended goals. Either the amount of in-service training had no impact on the level of satisfaction reported to theory, process and practice, and resources sections of the questionnaire or it in some cases had a negative impact on the level of satisfaction reported to these sections of the questionnaire. The latter pattern was true for teachers of the shared subject matters, while the former pattern was true in the responses given by sciences and arts teachers and administrators. It is recommended that the content of the in-service training programs be reevaluated and perhaps redesigned to more aptly reflect the Omani curriculum as it pertains to its theory, process and practice, use of resources, and the curriculum content, since in these regards the in-service training program has not excelled.

The negative effect among teachers of the shared subject matters may reflect a discrepency, introduced

through the in-service training programs in these subject matters, between the actual progress (or initial expectation) and the desired progress (post in-service training expectation) in the .implementation of the Omani curriculum. For example, teachers of the shared subject matter that have attended no in-service training programs report that they are 'greatly' satisfied and agree with the Omani educational objectives while teachers of the shared subject matters with 4 to 12 months or 1 to 2 years of in-service training reported that they are only 'somewhat' satisfied and neither agree nor disagree with the Omani educational objectives. Why should ones beliefs about the appropriateness of the Omani educational objectives change with increasing time spent in in-service training? This is especially disconcerting given that the items reflect the desired ideals of the designers. Perhaps the in-service training program has failed to reflect the theory, process and practice, and/or use of resources intended by the designer's of the Omani curriculum. It is also possible that level of satisfaction decreased as the teacher of the shared subject matters became more familiar with the designers' principles through the in-service training program. Finally, the negative response by teachers of the shared subject matters may reflect an impact of educational preparation, since most non-college degree teachers attend greater amounts of in-service training.

F. Location of In-service Training

Location of in-service training did not differentiate the responses given to the questionnaire by administrators and did not systematically differentiate the responses given by any teacher group.

Statistically significant differences as a function of the teacher's location of in-service training were limited and included only the following analyses: (a) the Omani educational objectives items by teachers of the shared subject matters, (b) the textbook items by teachers of the shared subject matters, (c) the Islamic education curriculum content by teachers of Islamic education, (d) one topic in the general science curriculum content (science and world food problems) by teachers of the general sciences, and (e) the third grade concepts taught in civic education by teachers of civic education. In each case, teachers trained outside of Oman reported slightly greater levels of satisfaction than teachers trained inside of Oman.

Among supervisors of the shared subject matters (Arabic and English Languages), a significant difference in the responses given to theory (Omani educational objectives items) and process and practice (methods of instruction and student assessment technique items) sections of the questionnaire was found as a function of location of in-service training. In these cases, supervisors of the shared subject matters trained inside Oman reported greater

satisfaction than those trained outside Oman. A significant effect of location of in-service training was not found in any analysis of science supervisors. Among Islamic education supervisors and Arts supervisors; too few subject were trained outside of Oman (n=4) to permit reliable statistical analysis. However, the qualitative analysis of the mean responses of supervisors in these latter groups were very similar regardless of location of training.

It is recommended that differences in the in-service training programs provided outside and inside of Oman for the supervisors of Arabic and English Languages be determined, so that additional workshops can be developed to bring supervisors of the Arabic and English languages with different training background to the same level of information about theory and process and practice of the Omani curriculum.

G. Workshop attendance

Although widespread effects of Workshop attendance were found in the responses given by teachers of the sciences, and to a lesser extent, teachers of the arts and the shared subject matters and supervisors of the shared subject matters, the pattern of results requires interpretation by subject group.

Among teachers of the sciences, workshop attendance significantly influenced the responses given to methods of

instruction items, student assessment technique items, staff items, facilities items, and textbook items, such that, those teachers of the sciences attending 2 workshops reported the greatest level of satisfaction (greater than that given by teachers of the sciences attending no workshops). The benefit of workshop attendance to teachers of the science peaked at 2 workshops and, in at least some cases, became significantly less beneficial as the number of workshops attended increased beyond 2 (e.g. the level of satisfaction with the facilities was significantly less among teachers of the sciences attending more than 3 workshops).

Among teachers of the shared subject matters, workshop attendance significantly influenced the responses given to theory and process and practice sections of the questionnaire and also to the Islamic education curriculum content items (assessed by Islamic education teachers only). In all of these cases, teachers attending 1 workshop reported greater satisfaction than teachers attending 3 or more workshops.

Among teachers of the arts, a significant influence of workshop attendance on the responses given to staff and facilities items was found. In each case, teachers of the arts attending 3 workshops reported greater satisfaction than teachers of the arts attending 1 workshop. The mean responses by teacher of the arts attending no workshops, 2

workshops or more than 3 workshops fell intermediate to the mean responses by teachers attending 1 or 3 workshops.

Among supervisors, a sufficient distribution of subjects in two or more levels of workshop attendance was available in the supervisors of the shared subject matters (Arabic and English languages) only, and in this case the comparison was limited to those supervisors attending either no workshops or more than three workshops. Among supervisors of the shared subject matters, a significant influence of workshop attendance was found in the analysis of their responses given to process and practice (methods of instruction and student assessment technique items) and process of curriculum development sections of the questionnaire. In all significant analyses, supervisors that had attended no workshops reported greater satisfaction than supervisors that had attended more than 3 workshops. A similar pattern of mean responses was found in the supervisor of the shared subject matter responses to Omani educational objectives items, however, a significant group difference could not be reliably shown.

Workshop attendance did not influence the responses given by administrators to any section of the questionnaire.

From the previous discussion, it seems clear that workshop attendance has a positive impact on the degree of satisfaction found among teachers to specific aspects of the Omani curriculum, although the number of workshops that

produces the ultimate effectiveness varies by subject matter. Hence it is recommended that: (1) In the short run and as determined in this study, the most effective number of workshops should be implemented in each subject matter area, so that every teachers will attend that specific number of workshops. (2) In the long term, the Ministry of Education should assess the level of learning and type of information learned with the most effective number of workshops. The aim of such a study is to identify the topics that bring about the most positive effects. Then, a plan should be developed to design a battery of workshops that adopt these topics. In terms of the implementation of the Omani curriculum to date, It is preferable to have the first workshop address general aspects of the curriculum and strategies of its implementation. A series of workshops could follow, geared to the specific topics of each subject matter. The plan should also include the mean by which attendance can be monitored, encouraged, and rewarded. Administration of the latter should occur at the level of the school district.

H. Teaching Experience

No systematic effect of teaching experience on teacher response to any portion of the questionnaire was obtained, with statistically significant differences limited to only three cases. (1) The responses given by teachers of the sciences to the teacher's manual items differ significantly

as a function of teacher experience. In this case, teachers with 4 to 6 years of teaching experience reported greater satisfaction with the teacher's manual than teachers with 7 to 10 years of teaching experience. The responses given by teachers of the sciences with more than 10 years of teaching experience or less than 4 years of teaching experience differed from the responses given by either teachers with 4 to 6 years or 7 to 10 years of teaching experience. (2) The responses given to third grade mathematics concepts by mathematics teachers differed significantly as a function of teaching experience such that teachers more than 4 years of teaching experience reported greater satisfaction than teachers with less than 4 years of teaching experience. (3) The responses given to items assessing the concepts taught in contemporary problems by geography teachers differed significantly in that teachers with 4 to 6 years of teaching experience reported greater satisfaction than teachers with more than 6 years of teaching experience.

The influence of teaching experience was also limited among supervisors. (1) Among supervisors of the shared subject matters (Arabic and English Languages), a significant difference was found in the responses given to process of curriculum development items by supervisors who had either 1 to 3 years of teaching experience or more than ten years of teaching experience. In this analysis, supervisors with 1 to 3 years of teaching experience

reported greater satisfaction than supervisors with more than 3 years of teaching experience. (2) Among supervisors of the arts and supervisors of the sciences, a significant difference was found in the responses given to facilities and/or staff resource items. In both cases, supervisors with 4 to 6 years of teaching experience reported greater satisfaction than supervisors with 1 to 3 years of teaching experience.

It can be concluded that teaching experience does not have a global influence on the level of satisfaction with the implementation of the Omani curriculum.

I. Teaching experience in Oman

Like the effect of total teaching experience, the effect of teaching experience in Oman had little influence on the overall responses given to the questionnaire overall. The few cases in which significant differences were obtained are reported in the following paragraphs.

Among teachers of the shared subject matters, the responses given to Omani educational objectives items, student assessment technique items, textbook items, and Islamic education curriculum content items (assessed by Islamic Education teachers only) were significantly different as a function of teaching experience in Oman. The general pattern of responses in all three cases suggested that greater teaching experience in Oman is related to less satisfaction with the Omani educational objectives, student

assessment techniques, and the textbooks. Typically, teachers of the shared subject matters with more than 10 years of teaching experience in Oman reported the least level of satisfaction while teachers with 1 to 3 years of teaching experience in Oman report the greatest level of satisfaction.

Among teachers of the sciences, a statistically significant difference in the responses given to facilities items was found as a function of teaching experience in Oman and, like the results from analyses of the teachers of the shared subject matter, it suggests that increased teaching experience in Oman is related to decreased satisfaction with the facilities.

No effect of teaching experience in Oman was found among supervisors of the shared subject matters responses to either theory, process and practice, resources, or process of curriculum development questionnaire items. All but a few supervisors of the sciences, arts or Islamic education had only 1 to 3 years of teaching experience in Oman.

II. THE RESULTS AND IMPLICATION OF THE RESULTS FROM THE MULTIPLE REGRESSION ANALYSIS OF THE IMPACT OF SIGNIFICANT DEMOGRAPHIC, ACADEMIC, AND TEACHING BACKGROUND VARIABLES ON THE RESPONSES GIVEN TO THE QUESTIONNAIRE BY EDUCATORS

The results from the stepwise regression analyses applied in in this study to explore the relationship between the independent variables that statistically differentiate subjects' responses to the questionnaire is exemplified by the results in the teachers of the shared subject matters

group case. In these analyses, at least 3 idependent variables had statistically differentiated the responses given to theory, process and practice and resources sections of the questionnaire, and, more than one of these independent variables contributed significantly to the regression equation. Thus, differences in the responses given to the questionnaire by teachers of the shared subject matters are best understood by the action of multiple independent variables. These results argue against the possibility that the large number of statistically significant differences found in the one-way ANOVA analyses represent the assessment of a single characteristic that is highly correlated with several independent variables.

III. THE RESPONSE OF THE TEACHER, SUPERVISOR, OR ADMINISTRATOR TO THE FIVE EDUCATIONAL CONCEPTS (FACTORS) DIFFERENTIATED THEIR RESPONSE TO OTHER CURRICULUM ISSUE.

A. Factor I: The importance of developing the students' personality (holistic vs single component)

The differentiation of any educator group by their response to Factor I also statistically differentiated their response to the Omani educational objectives. Thus, teachers, supervisors, and administrators who strongly agreed with statements supporting a curriculum that emphasized the development of the students' whole personality reported statistically greater satisfaction with the Omani educational objectives then those who's response to Factor I was neutral. With the exception of Islamic

education supervisors, educators that agreed strongly with Factor I reported that they were 'greatly' to 'fully' satisfied with the Omani educational objectives and their implementation, while educators that gave a neutral response to Factor I reported that they were only 'somewhat' to 'greatly' satisfied. The response to Factor I by Islamic education supervisors indicated that they either disagreed or were neutral toward a curriculum that emphasized the development of the students whole personality (the preferred single component model). Like other educators, however, the magnitude of their response to Factor I was positively related to their response to the Omani educational objectives. Those Islamic education supervisors who gave a neutral response to Factor I indicated that the Omani education objectives were 'seldom' to 'sometimes' satisfactory, while those who disagreed with Factor I reported that the Omani educational objectives were 'rarely' to 'seldom' satisfactory.

Overall, the responses given to factor I usually predicted the responses given to process and practice, resource, curriculum development, and curriculum content sections of the questionnaire by teachers of the shared subject matters, teachers of the arts and supervisors of the shared subject matters, but did not predict the responses given by administrators, teachers or supervisors of the sciences, or Islamic education supervisors to these same

sections of the questionnaire. All but 3 supervisors of the arts reported that they strongly agreed with Factor I, thus no statistical analysis of this group was possible.

The practical application of the concept defined by Factor I should be apparent at all levels of the curriculum including teaching strategies, evaluative techniques, staffing, facilities, and other resources, as well as the actual course subject matter. The results obtained here from teachers and supervisors of the shared subject matters and teachers of the arts suggest that the implementation of Factor I into all levels of the Omani curriculum has been successful: those teachers that most strongly supported Factor I were most satisfied with the questionnaire. However, the results obtained from teachers and supervisors of the sciences, Islamic education supervisors, and administrators suggest that the actual integration of this concept into the process and practice, resource, or curriculum content of the Omani curriculum is <u>not</u> viewed by these educators as successful; they do not see how development of the students' whole personality is reflected in the non-theoretical aspects of the curriculum. This is in light of the results demonstrating that the majority of these educators strongly support, a curriculum that emphasizes the development of the students' whole personality and indicate that the theoretical basis (Omani educational objectives) of the Omani curriculum reflects

this concept. The mean responses, by level of support for Factor I, by teachers of the science, supervisors of the sciences, administrators, and Islamic education supervisors that strong support Factor I report less satisfaction with the process and practice, resource, and curriculum content sections of the questionnaire, supporting a conclusion, from the viewpoint of the administrator and teachers/supervisors of the sciences, the curriculum has not yet fully achieved its goal of practically applying this concept.

B. Factor II: The importance of using a democratic approach in the classroom (democratic vs autocratic methods)

The differentiation of all teachers and administrators by their response to Factor II also statistically differentiated their response to the theory, process and practice, resources, and most curriculum content sections of the questionnaire. The same pattern of results was obtained for supervisors of the shared subject matters with the exception of the responses they gave to staff and facilities sections of the questionnaire which were not differentiated by their response to Factor II. Thus, teachers, supervisors of the shared subject matters, and administrators who strongly agreed with statements supporting a curriculum that emphasized the use of a democratic classroom management method reported statistically greater satisfaction with the Omani curriculum than those who's response to Factor II was neutral. Among these educators, the qualitative response of

those who agreed strongly with Factor II was 'greatly' or 'greatly' to 'fully' satisfied in regards to theory items, 'somewhat' to 'greatly' satisfied in regards to process and practice items, and 'somewhat' or 'somewhat' to 'greatly' satisfied in regards to resource items. The qualitative response by those who gave a neutral response to Factor II was only 'somewhat' to 'greatly' satisfied in regards to theory items, 'somewhat' or 'somewhat' to 'greatly' satisfied in regards to process and practice items, and 'somewhat' or 'seldom' to 'somewhat' satisfied in regards to resource items.

Overall, then, the responses given to Factor II predicted the responses given to the questionnaire by teachers of the shared subject matters, teachers of the arts, teachers of the sciences, and supervisors of the shared subject matters (except for staff and facilities items), and administrators, but was not related to the responses given by supervisors of the arts or supervisors of the sciences. The responses to Factor II by all Islamic education supervisors indicated that they did <u>not</u> support a curriculum that emphasized the use of a democratic classroom management technique (they preferred an autocratic method). The response of supervisors of the arts and sciences to Factor II statistically predicted their response to the Omani educational objectives and, for supervisors of the

arts only, predicted their response to the teachers manual and textbook resources.

The concept defined by Factor II (using a democratic classroom management method) is the desired intention of the Omani curriculum designers and its successful application as a method of teaching and evaluating students requires the appropriate facilities, staff and material (like textbook and teachers' manuals); thus, the responses given by educators to Factor II should predict the responses they give to the other aspects of the curriculum if the use of a democratic classroom management method has been successfully implemented. The results obtained here suggest that the implementation and integration of a democratic style of teaching in the Omani curriculum has been very successful since a positive relationship was found between the responses given to Factor II and the responses given to the Omani curriculum for all educators except supervisors of Islamic education, of the arts, and of the sciences. Supervisors of the arts and sciences did not evaluate the staff and facilities highly which may mean that they do not find these resources in sufficient supply. However, in regards to other process and practice and resource sections of the questionnaire, it is not clear why supervisors of the arts and sciences did not indicate that the implementation of a democratic classroom management style had been successful. Islamic education supervisors responded very

negatively to Factor II and, appropriately, find the Omani curriculum 'seldomly' satisfactory at any level (theory, process and practice, or resources).

C. Factor III: The importance of a student-centered curriculum

The response given to Factor III statistically differentiated the responses given to all sections of the questionnaire by teachers of the shared subject matters, teachers of the arts, and supervisors of the shared subject matters. Factor III also differentiated the responses given by teachers of the sciences to theory items, process and practice items, staff and textbook items and a limited number of specific curriculum content items. Administrators responses to theory items and method of instruction items were also differentiated by the level of support they gave to a student-centered curriculum (Factor III). Among supervisors of the arts and sciences, a statistically significant relationship was found only between their response to Factor III and their response to Omani educational objectives. Finally, all but one Islamic education supervisor disagreed with this Factor and appropriately the group reported very little satisfaction with any aspect of the Omani curriculum.

While the results from the analyses of the teachers of the shared subject matters and the arts responses to the questionnaire by Factor III provide evidence for a

successful integration of this concept into all aspects of their curriculum, the results from the teachers of the sciences analyses suggest that the current facilities, teachers' manual, and specific curriculum content in the sciences does not support a student-centered curriculum. The analyses of the supervisor responses by Factor III found that while supervisors of the shared subject matters report all aspects of the curriculum to support a student-centered education, supervisors of the arts and sciences do not. In fact, the responses by the latter supervisors to process and practice, resource, and curriculum content sections of the questionnaire (typically 'somewhat' satisfied) are not related to the level of importance they give to a student-centered curriculum. Since Factor III differentiated the responses given by supervisors of the arts and sciences to Omani educational objectives items, the lack of differentiation by this Factor in other aspects of the curriculum likely reflects an opinion by these supervisors that the integration of a student-centered philosophy into the process and practice and resources of the Omani curriculum has not yet been achieved. Finally, the results from the analyses of the administrators, like that of the teachers of the science, suggest that the facilities, staff, and perhaps evaluation methods do not successfully reflect a student-centered curriculum philosophy.

D. Factor IV: The importance of integrating the students'

social and cultural heritage into the curriculum

The results comparing the responses given to each section of the questionnaire by subjects that either strongly or moderately supported integrating the students' social and cultural heritage into the curriculum (Factor IV) clearly found that this concept has been integrated successfully into all aspects of the Omani curriculum. The responses given to Factor IV by all teachers and administrators were found to statistically predict the responses given to all aspects of the curriculum. A very similar pattern of results was obtained in these same analyses of the supervisors of the arts and sciences with two exceptions: (1) The responses by arts and science supervisors to curriculum development, staff and facilities items (arts only) were not statistically separable by Factor IV. (2) All but two Islamic education supervisors disagreed with Factor IV as would be predicted from the level of dissatisfaction with the Omani curriculum reported by this group.

E. Factor V: The importance of developing the students' thinking ability

The responses given to Factor V differentiated the responses given by all teachers to theory, process and practice, resources, and most curriculum content sections of the questionnaire, suggesting that teachers find all practical as well as theoretical aspects of the Omani curriculum consistent with the idea that they should develop

the students' thinking ability (Factor V). Supervisors of the shared subject matters and, to a slightly lesser degree, administrators and supervisors of the arts followed the same pattern as teachers. Supervisors of the sciences did not indicate that the importance of developing the students' thinking abilities was reflected in either the process and practice, resources, or curriculum content (process of development) of the Omani curriculum.

Overall, the Factors predicted the responses given by teachers, supervisors, and administrators to most questionnaire topics, favoring the interpretation that the implementation to date of the Omani curriculum is in the desired direction. The exception is Islamic education supervisors, whose overall response to the questionnaire was negative regardless of their responses to the five Factors. Their responses to the five Factors, however, were also negative, typically, indicating that they were not in agreement with the concepts defined by the Factors.

The extent that the subjects' response to Factors I, III and V reflected their response to the questionnaire varied as a function of the subjects' academic position and the questionnaire topic under consideration as indicated in the text above.

IV. DIFFERENCES IN RESPONSE TO THEORY, PROCESS AND PRACTICE, AND RESOURCE QUESTIONNAIRE ITEMS WERE FOUND AS A FUNCTION OF THE EDUCATORS POSITION AND AREA OF INSTRUCTION

Teachers, supervisors, and administrators all answered the same questionnaire. The comparison of their responses to each section of the questionnaire illustrated two points. (1) Islamic education supervisors gave unusually negative responses to all sections of the questionnaire except the facilities, equipment, and materials sections. [They did indicate that they were dissatisfied with the facilities, equipment, and materials, however, they were least dissatisfied with this aspect of the curriculum and presented a similar level of satisfaction to facilities, equipment, and materials as other educators.] Their response to the Omani educational objectives, methods of instruction, student assessment technique items, and textbook items differed significantly from all other comparison groups. While, their response to staff and teachers' manual items differed significantly from all comparison groups except supervisors of the arts and sciences. The Islamic education supervisor group was very consistent in their responses to the questionnaire (always indicating that they were dissatisfied). These results suggest that this group of supervisors is not, can not, or will not implement the new Omani curriculum.

Second, teachers of the arts consistently gave the most positive responses to the questionnaire, in many cases statistically different from other teacher groups. For example, in response to Omani educational objectives items

teachers of the arts reported statistically greater levels of satisfaction than teachers or supervisors of the shared subject matters and teachers of the sciences (also Islamic education supervisors). It would seem from these results that the implementation of the new Omani curriculum has been most successful among teachers of the arts subject matters.

Finally, no statistically significant differences between educator groups were found in the analyses of facilities, equipment, and material items or process of curriculum development items. The mean responses to these two sections of the questionnaire were among the least positive by all educator groups (except Islamic education supervisors).

To remedy these shortcomings in the implementation of the new Omani curriculum, it is recommended that: (1) Regarding the consistent negative attitude of the Islamic Education supervisors toward all aspects of the curriculum, the Ministry of Education should hold a conference attended by the Islamic education supervisors and other experts in Islamic teaching and curriculum development. The aim of the this conference will be to provide the Islamic education supervisor with a clear impression of the development policies of the Ministry of Education as well as a clear understanding that the Islamic education curriculum is important to the whole Omani curriculum. It should be stressed that the Islamic education curriculum must be

integrated by the participation of the Islamic education supervisors in the curriculum development process. It must be stressed that Islamic education cannot take a different track from the other subject matter areas. The experts and the Islamic education supervisors should work together to prepare a plan for the instruction of Islamic education supervisors on the process of curriculum development. The implementation of this plan can be through workshops or self study. Thus, Islamic education supervisors and the experts should work together to prepare a plan to improve the implementation of the Islamic education curriculum and its integration into the whole development process. The outcome of this plan should be evaluated by the Ministry of Education for 2 or 3 consecutive years. After five years, the Ministry of Education should decide if the supervisor of Islamic education are improving professionally or if they continue to present an obstacle to curriculum implementation process. Should the problem persist, the Ministry of Education might begin to replace all or some of these personnel.

(2) Regarding the shortcomings in the process and practice and resources of the Omani curriculum as judged by the supervisors of the arts and sciences, it is recommended that these two groups of supervisors meet during the conference scheduled to address this project and design alternative strategies for method of instruction and student

assessment techniques as well as developing lists of needed resources (human and physical). The Ministry of Education should take the strategies and lists developed by the supervisors of the arts and sciences and distribute them to schools for a comparative assessment of what resources and strategies are used at the different schools. The schools then can report to the school district on what is lacking in their school relative to these needs and then the school district can advise the Ministry of Education. The next step is for the Ministry of Education to budget their funds over the next 5 years to secure the resources and materials needed to successfully implement the new strategies for curriculum implementation regarding resources and educational aids.

V. STUDENT RESPONSE TO GENERAL CURRICULUM CONTENT, METHODS OF TEACHING, MATERIALS AND FACILITIES, STUDENT EVALUATIONS, TEXTBOOKS (BY SUBJECT MATTER), AND SPECIFIC CURRICULUM CONTENT (BY SUBJECT MATTER) QUESTIONNAIRE ITEMS DIFFERED BY THEIR DEMOGRAPHIC BACKGROUND.

The students questionnaire assessed the curriculum content (general and specific), method of teaching and evaluation, textbooks, and facilities at the Secondary school level from the students viewpoint. Both students of the Arts and students of the Sciences responded to an identical set of questionnaire items that asked them to what extent they were satisfied with their curriculum (general

curriculum content items): specifically, did they benefit from the curriculum cognitively, socially, and emotionally. The mean responses by students in the Arts section indicated that they were 'somewhat' to 'greatly' satisfied with their curriculum, while students in the Science section indicated that they were slightly less satisfied ('somewhat') with their curriculum. No statistically significant differences in the responses to the general curriculum items were found between students in the Arts section and students in the Sciences section, however, in response to this section of the students questionnaire statistically significant differences were found as a function of the students gender and school district. Specially, female students were more likely to report greater satisfaction than male students regardless of their section of study. In addition, as a function of school district, Science students, and too a lesser extent, Arts students reported different levels of satisfaction, although specific and systematic differences between school districts were isolated in the analysis of students in the Science section only. Specifically, students in the Science section from Wousta reported less satisfaction with the General curriculum than students from any other district.

Both students in the Arts section and students in the Science section also responded to three other student questionnaire sections including sections that assessed

their satisfaction with the Methods of Teaching, Methods of Student Evaluations, and Facilities available for their section of study.

The overall mean response by Arts and Science students to the methods of teaching, methods of student evaluation, and facilities did not differ significantly from each other. Both groups indicated that they were 'seldomly' satisfied with the methods of teaching and facilities at the Secondary school level. For example, the most common level of responding to items that assessed teaching strategies, school environment, classrooms, laboratories, libraries, instructional media, and activity centers (e.g. sport stadiums) fell between 2.00 and 3.00. Both Art and Science students indicated that they were 'somewhat' to 'greatly' satisfied with the appropriateness of the evaluation methods used at the Secondary school level. The mean responses to these items most often fell between 3.00 and 4.00.

The responses given to the methods of teaching, facilities, and evaluation sections of the questionnaire differed significantly as a function of the students' gender and school district. In all cases, females reported greater satisfaction than males regardless of section of study. In those cases assessing students in the Science section, those from Wousta reported the least satisfaction (significantly less than students from Dakhilyah, Sharqiyah, Batinah, and/or Dhahirah). In those cases assessing students in the

Arts section, specific district differences were obtained only in the analysis of methods of teaching in which students of the Arts from Janoubiyah and Sharqiyah reported statistically less satisfaction with the methods of teaching in the Arts section than students of the Arts from Dhahirah.

The pattern of differences obtained in the analyses of the students responses to process and practice, resource, and general curriculum content items by school district are not unlike those obtained by teachers. The results obtained from the students of the sciences might suggest that the overall implementation and availability of resources is worst in the district of Wousta and best in the district of Dhahirah.

Both Arts and Science students responded to items that addressed the textbooks used in Islamic Education, Arabic Language, and English Language. In addition, Arts students alone responded to questionnaire items on textbooks in the History of Arabic Literature, Social Studies, General Sciences, and Mathematics in the Arts section. Science students responded to questionnaire items on textbooks in Chemistry, Physics, Biology, Mathematics in the Sciences, and Human Culture and Contemporary Problems.

Similar types of items were assessed for the textbooks on each subject matter. Typically, students were asked to what extent the textbook adequately, or satisfactorily, expressed several characteristics, like clarity, age-related

appropriateness in terms of content and practical exercises, its relationship with similar textbooks in previous grades, its relationship with textbooks in other subject matters of the same-grade, its appearance (shape, volume, quality of print), and the usefulness of the practical exercises, illustrations, charts, and pictures as learning tool. Regardless of the subject matter addressed by the textbook, students in the Arts and Science sections reported that the textbook was 'somewhat' satisfactory in each characteristic. Their responses to the Islamic education and Arabic language textbooks did not differ significantly from one another. However, the responses given by students in the Arts section to the English language textbook was slightly but significantly greater (more satisfaction) than the responses given by the Science students. Arabic Language, English Language, and Islamic Education textbooks were the only textbooks shared by students in both the Arts and Science section.

All three demographic variables assessed (gender, nationality, and school district) statistically differentiated the responses given to the textbook items by students in both the Arts and Science sections. An effect of gender was found in the responses given by Arts students to the Arabic language, Islamic education, History, and Social Sciences textbooks; and was found in the responses given by Science students to Arabic Language, Mathematics,

and Physics textbooks. In all cases, female students reported greater satisfaction with the textbooks than males students.

An effect of school district was found in the responses given by Arts students to the Arabic Language, English Language, Islamic Education, Mathematics, History, Social Studies, and General Sciences textbooks. Among these analyses, specific group differences were found in the responses given to the English language, Mathematics, Islamic Education, Social studies, and General Sciences textbooks. In all cases except mathematics, students in the Artss section from Muscat, Dakhilyah, Musandam, and/or Roustaq reported less satisfaction with the textbook than students in the Arts section from Dhahirah, Janoubiyah, and/or Sharqiyah. In response to the mathematics textbook, students in the Arts section from Dakhilyah reported the least level of satisfaction while students in the Arts section from Musandam and Batinah reported the greatest level of satisfaction.

An effect of school district on the responses given by students in the Science section was found in their response to Arabic Language, English Language, Islamic Education, Mathematics, Chemistry, Physics, and Biology textbooks. Specific group differences were isolated in all analyses except the Arabic Language textbook and the Islamic education textbook analyses. In each significant analyses,

with the exception of biology, students in the Science section from Wousta reported the least level of satisfaction with the textbooks. Typically Science students from Janoubiyah, Dakhilyah, and Dhahirah reported the greatest level of satisfaction. The pattern of significant differences between the districts in response to the biology textbook differed. The responses of students in the Science section from Muscat and Roustaq to the biology textbook were the least, significantly less than the responses from students of most other school districts.

Finally, a statistically significant difference in the responses given to the Mathematics textbook and the Islamic education textbook were found between non-Omani and Omani students in the Science section. In these two cases, Omani students reported greater satisfaction with the mathematics textbook and the Islamic education textbook than non-Omani students in the Science section.

Students in the Arts and Science sections also responded to a series of questionnaire items assessing the curriculum content in their section. The Arts section includes subject matter areas that represent the Arts students' exposure to the science (Mathematics and General Sciences), social studies (History, Geography, Civic Education and Human Cultures), and general or core subject matters (Islamic Education, Arabic Language, and English Language).

The responses by students in the Arts section to History, Geography, Civic Education and Human Cultures, Arabic Language, Islamic Education and General Science questionnaire items followed a similar pattern overall. Students indicated that they were 'somewhat' to 'greatly' satisfied with the basic concepts and facts taught in each subject, while they were only 'seldomly' to 'sometimes' satisfied with the instruction of skills. Student gender and school district both differentiated the type of responses given to these subject matter areas. As is now a common pattern, female students reported greater satisfaction than male students with the history, geography, civic education, Arabic language, Islamic education, and general sciences curriculum content. The results by school district found specific group differences only in the analyses of the responses given to geography, Arabic language, and Islamic education curriculum content items. The pattern of differences in these cases was not entirely similar. The responses given by students in the Arts section to geography and Arabic language curriculum content items was most positive when the students were from Roustaq and least positive when the students were from Shaqiyah or Janoubiyah. The responses given to the Islamic education curriculum content items differed significantly between students from Wousta (least positive) and Dhahirah (most positive).

The response given to Mathematics curriculum content items and English Language curriculum content items by students in the Arts section indicated that they were only 'seldomly' or 'sometimes' satisfied with these curricula (mean responses fell between 2.00 and 3.00). Similar to the responses to other curriculum content areas in the Arts, the responses could be differentiated by the students gender, district, and nationality (only English language curriculum). Again, female Arts students reported greater satisfaction with the content of these subject matter areas than male Arts students. A specific effect of school district was limited to the English language curriculum content items. Particularly, students in the Arts section from Roustaq gave the most positive response (greatest satisfaction) to the curriculum content and students from Janoubiyah and Sharqiyah gave the least positive response (dissatisfaction). Finally, an effect of nationality on the Arts students response to the English language curriculum content items was found, such that non-Omani students in the Arts section reported greater satisfaction with the English language curriculum content than Omani students in the Arts section.

Students of the Sciences responded to groups of items addressing the eight subject matter areas in their section: Chemistry, Physics, Biology, Mathematics, Arabic Language, Islamic Education, Human Culture, and English Language. The

subject matter areas represent the Science students' exposure to science subject matter (Chemistry, Physics, Biology, and Mathematics), social studies subject matter (Human Culture and Contemporary problems), and general or core subject matters (Islamic Education, Arabic Language, and English Language).

Overall, students in the Science section indicated that they were 'somewhat' or 'somewhat' to 'greatly' satisfied with their comprehension of the topics taught in chemistry, physics, biology, mathematics, human cultures and contemporary problems, Islamic education, and Arabic language. Gender and school district statistically differentiated the responses given by students in the Science section in the patterns typical of the Science students responses. Females reported greater satisfaction with the curriculum content than males. Typically, Science Students from Wousta reported less satisfaction with the curriculum content than students from most other districts. In addition to the effects of these two demographic variables, nationality differentiated the responses given to chemistry and biology curriculum content items. In both cases, non-Omani students reported greater satisfaction than Omani students.

The Science students response to English language items indicated that they were only 'seldomly' to 'sometimes' satisfied with this curriculum. Again, this result is

modified by the students gender and school district in the typical pattern.

From the analyses of the students' responses to their questionnaire and how these responses were shaped by the independent variables, three important issues stand up clearly and call for more investigation. These issues are

(1) The level of satisfaction of the female students is consistently higher than that of the male students regardless of the questionnaire section. This could be interpreted simply as differences in male and female response patterns to a Likert-like scale tool. Or, it could be suggested that the differences between males and females reflects a real difference in the way the curriculum is implemented in the girls schools and the boys schools. This could be restated in the following manner; could differences between females and males reflect the quality and availability of staff, facilities, administrative, and supervisory role in the supporting and follow-up processes of implementation.

(2) The consistent dissatisfaction of the Science students from the Wousta school district with all facets and aspects of the curriculum represents a unique problem in this school district. Could this consistent dissatisfaction be the result of a complete failure of the educational system in implementing the new curriculum at all levels in Wousta?

(3) Some districts, like Dhahirah, are always characterized by high levels of satisfaction while others, like Wousta, are characterized by consistent low levels of satisfaction.

To be able to approach these problems and interpret them in a scientific manner the following recommendations are suggested.

(1) A comparative study should be conducted between the girls schools and the boys schools to compare the administrative and supervisory role in supporting the implementation of the curriculum. The following should also to be compared: (a) the quality and availability of staff and their performance, (b) the quality and availability of the material resources and their utilization, (c) the follow-up procedures and the efforts used to improve the process of curriculum implementation. This study should aim to identify the factors that have lead to high levels of success and satisfaction with the curriculum implementation in the girls schools, in order to apply the results of the study to improve the process in the boys schools.

(2) An analytical study should be conducted in Dhahirah and Wousta because they report the most and the least satisfaction, in order to identify the positive and negative factors leading to the discrepencies in satisfaction with the curriculum in these two school districts. Some aspects to be analyzed and compared are: (a) qualifications of the

teaching, supervisory, and administrative staff, their levels of performance, and their role in achieving successful curriculum implementation; (b) availability of resources at the right time when they are needed, and the level of utilization of these resources; (c) the level of cooperation between the various sections of educators in the school district and with the local community to secure the appropriate atmosphere for successful curriculum implementation.

VI. GRADUATE RESPONSES TO QUESTIONNAIRE ITEMS ON THE GENERAL CURRICULUM, METHODS OF TEACHING, FACILITIES, METHODS OF EVALUATION, AND TEXTBOOKS USED AT THE SECONDARY SCHOOL LEVEL IN OMAN DIFFERED AS A FUNCTION OF EDUCATIONAL VARIABLES.

A sample of 107 Omani citizens and 3 non-Omani citizens who graduated from an Omani Secondary School in 1987 or later were gathered and asked to respond to a short questionnaire that assessed their satisfaction with the general curriculum content, method of teaching, facilities, evaluation techniques, and textbooks used during their Secondary education.

The mean responses to general curriculum content items and evaluation technique items typically fell between 3.00 and 4.00, indicating the graduates were 'somewhat' to 'greatly' satisfied with both the general curriculum content taught at the Secondary school level and the methods of evaluating information learned by the student. Graduates were less satisfied with the overall methods of teaching and

available facilities at the Secondary school level: typically indicating that they were 'seldomly' to 'somewhat' satisfied (mean responses between 2.00 and 3.00). Finally, in response to items assessing their satisfaction with the textbooks used at the Secondary school level, graduates indicated that they were only 'somewhat' satisfied.

The extent to which the graduate's response to each of these five questionnaire sections was related to the graduates' demographic and/or academic variables was assessed by one-way ANOVA. Four independent variables were assessed: gender, district of study, level of continuing education, and current employment.

The only statistically significant differences between male and female graduates was found in the analysis of their responses to methods of teaching items. Female graduates tended toward a slightly more positive evaluation of the methods of teaching at the Secondary school level [mean response by males 2.78 and by females 3.17].

A statistically significant influence of level of continuing education was also found, in this case to the graduates' response to facilities, evaluation techniques, and textbooks sections of the questionnaire. This variable compared the responses given by graduates that had continued their education in either Education and Islamic Sciences, Engineering, an Intermediate College for Teachers, or Other. In all three cases, graduates falling into the 'other'

category reported the greatest level of satisfaction with the facilities, evaluation techniques, and textbooks. The least level of satisfaction was reported by graduates that continued into Intermediate College for Teachers, followed closely by the responses given by graduates that went to Engineering School or to an Education and Islamic Sciences school.

No systematic differences in responses given by graduates to any questionnaire items were found as a function of the school district that they attended, or, their current employment as either a clerical worker, technical worker, or administrative worker.

Overall, the evaluation by graduates of the new Omani curriculum was rather neutral. While the level of satisfaction was positive in regards to the General Curriculum Content and the Evaluation techniques and neutral in regards to textbooks, it was negative in regards to the Methods of Teaching and Facilities. Dissatisfaction with the Facilities and the Textbooks seemed to be elicited from graduates that went on to either engineering school or an Intermediate college for teachers. These same graduates also reported less satisfaction to the method of evaluation items, although, overall, their responses indicated that they were satisfied. The responses given to methods of teaching items tended to indicate dissatisfaction regardless of the graduates' district of employment, continuing

education, or current employment. Dissatisfaction with the methods of teaching may be isolated to male graduates with female graduates indicating that they are neither satisfied or dissatisfied. General curriculum content was rated positively by all graduates regardless of gender, school district, continuing education, or current employment.

These results suggest that a follow-up study be conducted to assess how the facilities, textbooks, and teaching methods fail to provide students with the adequate resources needed to continue into the intermediate college for teachers or engineering school.

VII. PARENT RESPONSE TO THE PARENT QUESTIONNAIRE AND THE ABSENCE OF ANY VARIATION IN RESPONSE DUE TO DIFFERENCES IN THE PARENTS DEMOGRAPHIC BACKGROUNDS.

One hundred parents were asked to answer a short questionnaire addressing their view of the current Secondary school level education. The items in this questionnaire addressed topics like how often the parent reads the child's textbook (one item from each possible textbook) and whether or not they find the textbooks age-appropriate, well designed, and interesting, whether or not the child reports liking school, whether or not the child studies at home, and how the parent evaluates the child's performance (e.g. grade reports). The responses to these type of items indicated that parents were 'somewhat' to 'greatly' satisfied with the Secondary school education. Other items in this questionnaire assessed to what extent the parents felt that

the child had difficulty in some subject matters and how much time the child spends in non-school related activities. Parents indicated that their children 'seldomly' to 'sometimes') had difficulty with the classwork and/or 'sometimes' engaged in non-school activities (playing, listening to the radio or television).

The parents' response to the parent questionnaire was assessed in light of many non-manipulated variables including gender, nationality, school district, educational preparation, number of children in secondary school, grade level of children in secondary school, number of children that graduated from secondary school before 1987, whether or not they knew about the new Omani curriculum and if so, how they knew about it, and finally, whether or not they attended parent-teacher conferences. None of these variables could statistically differentiate the parents responses to the questionnaire.

It is concluded that the efforts by theMinistry of Education of Education and each individual School district to acquire and/or create a positive community atmosphere for students at the Secondary school level has been successful and should continue.

LIST OF RECOMMENDATIONS

The following is a list of recommendations stated in the main text. Each recommendation is stated along with the issue or problem that the respective recommendation addresses.

Problem Statement	Recommendation
1. Gender differences identified among administrators and students suggested that global differences in the implementation and/or satisfaction with of the Omani curriculum have occurred as a function of gender and may reflect differences between the girls and boys schools.	Differences in the responses of both administrators and the students by gender should be more closely investigated to tease apart differences due to general attitude and expectations from differences due to the unequal distribution of human and physical resources, support, and guidance in the process of curriculum development between girls and boys schools. It was recommended that a comparative study between boys and girls schools be conducted to identify whether differences in resources, support and guidance do indeed exist. This study should compare the (a) qualifications of the teaching, supervisory, and administrative staff, (b) availability of the resources, (c) the level of cooperation between the school and the local community.
2. Among teachers of the shared subject matters, a difference in response was found as function of nationality suggesting that teachers of Islamic education, Arabic language, and/or English language of Omani and non-Omani nationality have different levels of expectations for the implementation of the Omani curriculum.	A workshop should be developed to minimize differences in expectation between Omani and non-Omani teachers of the shared subject matters. To provide the appropriate information for such a workshop and exploratory workshop should be held for teachers of Islamic education, Arabic language, and English language separately to discuss and determine where the expectation of these teachers differs (a) as a function of nationality and (b) from the designers' intentions.

Problem Statement	Recommendation
3. Differences in satisfaction with the implementation of the Omani curriculum were isolated repeatedly as a function of the teachers district of employment. The pattern differences differed somewhat among the specific teacher groups.	A comparative study designed to assess the current implementation of the Omani curriculum (i.e., specific administration of programs designed to facilitate the implementation of the Omani curriculum and/or the distribution and quantity of resources) in the nine school districts should be performed. This additional study should focus on those districts that reported the most or least satisfaction with the Omani curriculum in this project. <u>Teachers of the shared subject matters:</u> Compare theory and process and practice issues between the districts of Dhahirah and Janoubiyah. Compare resources between Dhahirah and Wousta and Roustag. <u>Teachers of the arts:</u> Compare process and practice issues between the districts of Dhahirah and Wousta. Compare resources between Dhahirah (most positive) and Batinah, Roustaq, and Dakhilyah. <u>Teachers of the Sciences:</u> Compare process and practice issues and facilities and staff between Janoubiyah and Wousta and Batinah. <u>Students, particularly in the Science section:</u> Compare the sections offered in Dhahirah and Wousta.
4. Level of education significantly predicted the level of satisfaction given by teachers in the shared subject matters and teachers of the sciences. In these cases, a college education either in education or not in education resulted in greater satisfaction.	Teachers of the shared subject matters and teachers of the science should have a college degree. The degree need not be specific to education.

Problem Statement	Recommendation
5. The amount of In-service training obtained by teachers, supervisors, and administrators had no impact of the level of satisfaction with the implementation of the Omani curriculum and among teachers of the shared subject matters the amount of in-service training had a negative impact on level of satisfaction.	The goal of the in-service training program is to educate the teachers, supervisors, and administrators on the process of implementation of all aspects of the Omani curriculum, so that the teacher, supervisor, and administrator will be better able to participate effectively in the implementation process. Failing this goal, all in-service training programs should be re-evaluated and redesigned to more aptly reflect the Omani curriculum in terms of its theory, process and practice, use of resources, and the curriculum content. Among supervisors of Arabic Language and English, differences in in-service training may possible reflect the location of in-service training, since a significant difference between Omani and non-Omani supervisors of the shared subject matters was found in this study.
6. The effect of workshop attendance frequently in the desired direction in that attending some workshops increased the subjects level of satisfaction, however, the effect of workshop attendance was limited in that an increase in workshop attendance did not produce a corresponding increase in satisfaction.	In the short run, workshop attendance should be encourage but only the attendance of the most effective number (as specified in page 623-624). Over the long run the Ministry of Education should assess the level of learning and type of information learned when the most effect number of workshops is attended. Then a plan should be developed to design a battery of workshop that adopt and extend the information currently taught in workshops, so that increasing workshop attendance results in increasing implementation of the Omani curriculum (and consequently, satisfaction in curriculum implementation).

Problem Statement	Recommendation
7. Islamic education supervisors are dissatisfied with all aspects of the Omani curriculum.	The Ministry of Education should hold a conference to provide the Islamic education supervisor with a clear impression of the development policies of the Ministry of Education as well as a clear understanding that the Islamic education curriculum is important to the whole Omani curriculum. It should be stressed that the Islamic education curriculum must be integrated by the participation of the Islamic education supervisors in the curriculum development process. Experts in Islamic education and curriculum development should also attend this conference in order to advice Islamic education supervisors and to work together with the Islamic education supervisors to prepare a long-term plan for the instruction of Islamic education supervisors on the process of curriculum development. The implementation of this plan should be through workshops or self-study and should be evaluated by the Ministry of Education each year for 2 to 3 years. An alternative decision may be necessary after five years if the Ministry of Education does not find that supervisors of Islamic education have improving professionally.

Problem Statement	Recommendation
8. Supervisors of the arts and sciences reported that they were not satisfied with process and practice or resources available to them.	During the regular conference to hear this report, supervisor of the arts and sciences should be encourage to meet and specify as a group as the deficits in curriculum implementation that they have run into. As a final report of their meeting they should (a) recommend alternative methods that will more adequately implement the designers' intentions for the process and practice of the Omani curriculum and (b) develop a list of resources that are in short availability or of inadequate quality. The outcome of the meeting of these two groups of supervisors should be circulated to schools in each school district for feedback and then reported to the Ministry of Education. The Ministry of Education then should evaluate its budget in light of the needed changes in resources and materials.
9. Some graduates reported that they were not satisfied with the facilities, textbooks, and teaching methods during their secondary school education. This was particularly true for graduates that continued on to an intermediate college for teachers and, to a lesser extent, engineering school.	A follow-up study should e conducted to assess how the facilities, textbooks, and teaching methods at the secondary school fail to provide students with the needed resources to continue into intermediate college for teachers or engineering school.

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EVALUATION OF [illegible] THE [illegible]

SECONDARY LEVEL
PART II

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EA 022 035 - Part II

Sultanate of Oman

Ministry of Education and Youth

EVALUATION OF CURRICULUM
THE CASE OF OMAN

SECONDARY LEVEL
PART II

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1989

APPENDIX A

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2. Supervisor's Questionnaire
   Part I : Section A:General Information

   It should noted here that all the sections and parts mentioned above under the title "Teachers Questionnaire" were revised according to Supervisors' functions. Then they were administered to the selected Supervisors' samples.

3. Administrator's Questionnaire
   Part I : Section A:Educational Administrators Information

   It should be noted here that all the section and parts mentioned above under the title "Teachers Questionnaire" were revised according to Administrators' functions. Then they were administered to the selected Administrators' samples.

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TEACHER'S QUESTIONNAIRE

PART I
SECTION A: GENERAL INFORMATION
SECONDARY LEVEL
(FOR TEACHERS ONLY)

In front of the following items, please indicate the appropriate information pertaining to you as a secondary teacher by using (X) for such indication :

1. Sex : ---- Male ---- Female

2. Nationality : ---- Omani ---- Non-Omani

3. School District:

---- Muscat
---- Al-Batinah
---- Al-Roustaq
---- Al-Dhakhaliyah
---- Al-Sharqiyah
---- Al-Wousta
---- Al-Dhahirah
---- Al-Janoubiyah
---- Musandam

4. The Secondary grade level (class) in which you teach:

---- First Grade
---- Second Grade
---- Third Grade

5. Subject-matter you teach in Secondary level:

---- Islamic Studies
---- Arabic
---- Mathematics
---- Chemistry
---- Physics
---- Biology
---- General Science
---- History
---- Geography
---- Civics (Omani Soc., Arabic Soc., Islamic Soc.)
---- Human Studies
---- Contemporary Problems
---- English

6. Average number of students in your class:

---- Less than 25 students
---- Between 25 to 35 students
---- More than 35 studens

7. Number of years you taught:

---- From one to three years
---- From four to six years
---- From seven to ten years
---- More than ten years

8. Number of years you taught in the Sultanate of Oman:

---- From one to three years
---- From four to six years
---- From seven to ten years
---- More than ten years

9. Your Educational Preparation:

---- University Graduate (Educational Degree)
---- University Graduate (Non-Education Degree)
---- Graduate of Teacher Institute
(2 years after Secondary School)
---- Graduate of Teacher Institute
(1 year after Secondary School)
---- Graduate of Teacher Insititute
(5 years after Preparatory School)
---- Graduate of Teacher Institute
(3 years after Preparatory School)

10. Duration of In-Service Training in your area of specialization:

---- Did not attend any in-service training.

---- Less than a month.

---- From one to three months.

---- From four to six months.

---- From seven to twelve months.

---- From one to two years.

11. Where did you atttend your In-service training:

---- Sultanate of Oman.

---- Outside the Sultanate of Oman.

12. How many workshops did you attend in order to apply the Omani Curriculum effectively:

---- Did not attend any workshop.

---- One workshop

---- Two workshops

---- Three workshops

---- More than three workshops.

PART I
SECTION B 1: OMANI EDUCATIONAL PHILOSOPHY
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning some ideas about Omani Educational Philosophy. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Educational Philosophy in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

The Educational Process in Oman emphasizes:

1. Develop a loyalty to the Omani Society..... 5 4 3 2 1

2. Develop and encourage desirable societial behavior?..... 5 4 3 2 1

3. Promote awareness and encourage fulfillment of civic responsibilities?..... 5 4 3 2 1

4. Develop and encourage desirable scientific and social views?..... 5 4 3 2 1

5. Promote an awareness that learning is life-long process and continues through-out individual's life time..... 5 4 3 2 1

6. Facilitate the capacity to experience multiple loyalties (eg. facily, country, religion, culture) and identitities..... 5 4 3 2 1

7.	Promote an appreciation for the deveristy in human behavior, beliefs, and customs?.....	5	4	3	2	1
8.	Develop the capacity for independent study, for continuing learning outside of the classroom.....	5	4	3	2	1
9.	Promote a positive attitude toward learning and inquiry.....	5	4	3	2	1
10.	The Curriculum should reflect skills in analyzing issues and problems.....	5	4	3	2	1
11.	Facilitate critical thinking skills, such as skills in structuring pertinent questions, or gathering and organizing data, and making generalizations, etc.....	5	4	3	2	1
12.	Develop the ability to judge the validity of evidence and draw sound conclusions from data.	5	4	3	2	1
13.	Promote a capacity to recognize and tolerate complexity and ambiguity.....	5	4	3	2	1
14.	To the extent that there is evidence of long-range goals of the Omani Educational Curriculum and considering the nature and importance of the history, philosophy, and the lives of Arabic and Islamic scholars as major cultural influences.....	5	4	3	2	1
15.	Develop knowledge of facts and concepts that are basic to understanding of the Omani cultural heritage.....	5	4	3	2	1
16.	Encourage the ability to work together cooperatively in group projects.....	5	4	3	2	1
17.	Facilitate positive attitudes and habits of expressing hunches and guesses in early stages of inquiry.....	5	4	3	2	1
18.	Promote a consciousness of and commitment to social problems and issues.....	5	4	3	2	1

19. Cultivate the use of the imaging and conceptualizing subject matter principles..... 5 4 3 2 1

20. Reflect mastery of basic terms, facts, and concepts of the subject matter..... 5 4 3 2 1

21. Encourage an awareness and knowledge of scientific processess, mechanisms, and effects?..... 5 4 3 2 1

22. Develop positive attitudes toward scientific knowledge and methods..... 5 4 3 2 1

23. Promote an ability and desire to use language correctly in writing or talking?.... 5 4 3 2 1

24. Facilitate an ability to relate the Omani Curriculum to everyday life..... 5 4 3 2 1

25. Reflect and ability and desire to apply what is learned from the Omani curriculum to one's life?..... 5 4 3 2 1

26. In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

    a. Memory: the recall or remembering of facts, rules, concepts, generalizations, etc..... 5 4 3 2 1

    b. Comprehension: Understanding what is being communicated but not necessarily relating it to other things..... 5 4 3 2 1

    c. Application: Using knowledge, methods, theories, etc., in new situations (to solve problems, for example)..... 5 4 3 2 1

    d. Analysis: Breaking something down into its component parts and understanding the inter-relationship of the parts..... 5 4 3 2 1

e. Synthesis: Putting things together to form a new entity such as a new idea, hypothesis, or set of relationships..... 5 4 3 2 1

f. Evaluation: making quantitative and qualitative judgements based on stated standards or criteria..... 5 4 3 2 1

27. Develop knowledge of facts, concepts, and generalizations which make up the various subject matter of the Omani Educational Curriculum..... 5 4 3 2 1

28. To what extent is there evidence attention is being given to coordination and integration the Omani Educational Curriculum among the various subject matters?..... 5 4 3 2 1

29. To what extent efforts are made to follow up the progress of students (from 1st to 3rd grade), to determine that the sequencing and content of the subject matter is meeting the needs of the Omani student..... 5 4 3 2 1

30. To what extent has the Ministry of Education demonstrated responsibility for facilitating the Omani Educational Curriculum, through recognition that specific facilities and equipment, as well as properly trained teachers, are needed?..... 5 4 3 2 1

31. To what extent does the Omani Educational Curriculum emphasize the affective aspects of the subject matter (eg. values, attitutdes, etc.)..... 5 4 3 2 1

PART I

SECTION B 2: THE EDUCATIONAL OBJECTIVES

SECONDARY LEVEL

(Teachers)

Introduction: The following is a list of statements concerning some ideas about The Educational Objectives. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Educational Objectives in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. The curriculum should consist of subject matter to be learned and skills to be acquired..... 5 4 3 2 1

2. The learning of proper attitudes is often more important than the learning of subject matter..... 5 4 3 2 1

3. It is more important that the student learn how to approach and solve problems than it is for him to recall information included in the subject matter..... 5 4 3 2 1

4. The true view of education is to so arrange learing that the student gradually builds up a storehouse of knowledge that he can use in the future..... 5 4 3 2 1

5. Teachers should keep in mind that students have to be made to work..... 5 4 3 2 1

6. Standards of achievement should not be the same for all students; they should vary from one student to another..... 5 4 3 2 1

7. The goals of education should be defined in accordance with the students' interests and needs, as well as by the demands of society... 5 4 3 2 1

8. Right from the very first grade, teachers must teach the student at the level of his ability and not at the level of the grade he is in..... 5 4 3 2 1

9. Each subject and activity should be aimed at developing a particular part of the student's makeup: intellectual, social, physical, or spiritual..... 5 4 3 2 1

10. Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to something as important as teaching tomorrow's citizens..... 5 4 3 2 1

11. In Omani schools, learning which is organized around life experiences is more desirable than learning organized around subject matter..... 5 4 3 2 1

12. We should fit the curriculum to the student and not the student to the curriculum..... 5 4 3 2 1

13. Subjects that sharpen the mind, like mathematics and sciences, need greater emphasis in the Omani school curriculum..... 5 4 3 2 1

14. The healthy interaction among students is just as important in school as the learning of subject matter..... 5 4 3 2 1

15. The curriculum should contain an orderly arrangement of subjects that represent the best of the Omani cultural heritage..... 5 4 3 2 1

16. True discipline springs from interests, motivation, and involvement in problems relevant to the student..... 5 4 3 2 1

17. Emotional development and social development are as important in the evaluation of a student's progress as academic achievement.... 5 4 3 2 1

18. Students should be taught that all problems should be subjected to cirtical and objective analysis, whether the problems are religious, moral, economic, or social in nature..... 5 4 3 2 1

19. Learning is experimental; the student should be taught to test alternatives before accepting any of them..... 5 4 3 2 1

PART II
SECTION A 1: PROCESS OF CURRICULUM DEVELOPMENT
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning the Process of Curriculum Development. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Process of Curriculum Development in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that each of the following groups should participate in such development?

   a. Teachers..... 5 4 3 2 1
   b. Supervisors..... 5 4 3 2 1
   c. Education administrators..... 5 4 3 2 1
   d. Students..... 5 4 3 2 1
   e. Parents..... 5 4 3 2 1
   f. Concerned groups like industry, commerce, etc..... 5 4 3 2 1

2. To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process:-

   a. In defining the objective of your subject matter..... 5 4 3 2 1

b. In choosing and sequencing the topics to be included in each grade level..... 5 4 3 2 1

c. In the way the selected material is presented in the text books..... 5 4 3 2 1

d. In choosing the activities that suit the students..... 5 4 3 2 1

e. In trying out the suggested material on a small number of classes before the wide scale installation of the new curriculum... 5 4 3 2 1

f. In evaluating every step of the development process..... 5 4 3 2 1

3. To what extent do you feel that your feed back to the designers was taken seriously and adopted in accomplishing each step:

a. During curriculum development process..... 5 4 3 2 1

b. During Curriculum implementation and yearly follow up..... 5 4 3 2 1

4. To what extent do you feel that each of the other affected groups was given a fair chance of participation in the curriculum development process?

a. Supervisors..... 5 4 3 2 1

b. Educational administrators..... 5 4 3 2 1

c. Students..... 5 4 3 2 1

d. Parents..... 5 4 3 2 1

e. Various social groups..... 5 4 3 2 1

5. To what extent do you have a clear picture of the curriculum in your subject matter from grade 1 through 12?..... 5 4 3 2 1

6. If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during its development?

a) At the beginning..... 5 4 3 2 1

b) During the development process..... 5 4 3 2 1

c) When you were asked to implement it..... 5 4 3 2 1

7. To what extent do you feel that you have been given enough and timely information about the curriculum development at each of the following stages?

a. Defining the philosophy of curriculum development..... 5 4 3 2 1

b. Stating the objectives of each subject matter..... 5 4 3 2 1

c. Choosing the topics to be included..... 5 4 3 2 1

d. Writing the material..... 5 4 3 2 1

e. Trying it out on a small sample..... 5 4 3 2 1

f. Evaluating the try out..... 5 4 3 2 1

g. Modifying the material for final version... 5 4 3 2 1

8. The process of Curriculum development continues after it has been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following:

a. To what extent is each edition of the textbook improved in comparison with the one of the previous year..... 5 4 3 2 1

b. At the end of every school year, to what extent are you asked to give your evaluation of the curriculum and your suggestions for its improvements..... 5 4 3 2 1

c. To what extent are you informed of the changes before it is given to you to implement..... 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
ISLAMIC EDUCATION - SECONDARY LEVEL
(CLASS II, III)

Introduction: Below are several statements concerning the Omani Curriculum in Islamic Education. Some of the statements are of a general nature, and some apply specifically to the course you teach. Please respond to each of the statements by indicating your assessment as to the extent that the Omani Islamic Education Curriculum has been successful in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1.	To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the contents of the Islamic Education Curriculum?	5	4	3	2	1
2.	To what extent are the number of weekly hours allocated for teaching curriculum sufficient for realizing the desired objectives of the Islamic Education Curriculum?	5	4	3	2	1
3.	To what extent does the Islamic Education Curriculum that you teach emphasize the historical aspects of Islam?	5	4	3	2	1
4.	To what extent does the Islamic Education Curriculum of the classes you teach emphasize the philosophical aspects of Islam?	5	4	3	2	1
5.	To what extent does the Islamic Education Curriculum encourage the students to participate in some of the extra curricular scholastic activities - such as the Religious Club and the Quranic recitation contests?	5	4	3	2	1

6. To what extent do teachers participate in the process of developing the Islamic Education Curriculum?	5	4	3	2	1
7. To what degree is there integration among the Islamic Education Curriculum in the Primary, Preparatory, and Secondary levels?	5	4	3	2	1
8. To what extent is integration realized between the Islamic Education Curriculum in Grades I, II, and III of the Secondary Level?	5	4	3	2	1
9. To what extent is there integration, in the Omani Curricula, between Islamic Education and other subjects:					
a. Islamic Education and Arabic Language?	5	4	3	2	1
b. Islamic Education and Social Studies?	5	4	3	2	1
c. Islamic Education and Science?	5	4	3	2	1
d. Islamic Education and Mathematics?	5	4	3	2	1
e. Islamic Education and English Language?	5	4	3	2	1
10. To what extent does the curriculum encourage students to understand that Islamic Education is not only an organized component of knowledge, but also a method of thinking and behaving as well?	5	4	3	2	1
11. To what extent is the practical exercise of religious worship:					
a. an integrated part of the Islamic Education Curriculum?	5	4	3	2	1
b. a basic component of the Islamic Education method?	5	4	3	2	1
12. To what extent does the Islamic Education Curriculum encourage the students to develop basic attitudes and skills necessary for critical thinking, namely:					
a. not making hasty judgements?	5	4	3	2	1
b. testing the accuracy of information?	5	4	3	2	1
c. evaluating the sources of information?	5	4	3	2	1
d. utilizing varied sources of information?	5	4	3	2	1

13. To what extent does the Islamic Education Curriculum encourage students to develop basic attitudes and skills necessary for rational thinking, namely:

    a. Deductive Reasoning: applying general principles to special cases? 5 4 3 2 1

    b. Inductive Reasoning: deriving a general principle or basis from special cases? 5 4 3 2 1

14. To what extent does the Islamic Education Curriculum motivate the students to read additional Islamic references on their own? 5 4 3 2 1

15. The content of the Islamic Education Curriculum at the Secondary School Level (Grades I through III) was designed as independent study encompassing the six components of Islamic Education. To what extent do you consider that the "Separate Lessons Method" leads to the realization of the desired integration within the components of Islamic Education as stipulated in the curriculum project? 5 4 3 2 1

16. To what extent do you agree that the Islamic Education Curriculum contributed to :

    a. reinforcing the awareness and active participation as a citizen of the nation? 5 4 3 2 1

    b. emphasizing that Omani culture is based on Islamic culture? 5 4 3 2 1

17. To what extent did the Islamic Education Curricula contribute to the realization of the following:

    a. encountering the challenges of modern intellectual and cultural assimilation? 5 4 3 2 1

    b. liberation of intellect from following foreign traditions and imitation phenomena? 5 4 3 2 1

    c. creativity and innovation within the framework of Islamic thought? 5 4 3 2 1

18. To what extent were the developmental needs of secondary level students realized through the selection of Quranic Ayahs (Hadith) and Prophets Traditions?	5	4	3	2	1
19. To what extent did the Islamic Education Curricula contribute to establishing commitments to and exercise of functional Islamic rules?	5	4	3	2	1
20. To what extent did the Islamic Education Curricula contribute to the realization of the following:					
a. instilling the love of God Almighty in hearts?	5	4	3	2	1
b. instilling love of Prophet Muhammad and following his guidance?	5	4	3	2	1
c. instilling love for the Prophet's companions and following their guidance?	5	4	3	2	1
d. instilling pride in Islam?	5	4	3	2	1
21. To what extent did the Islamic Education Curriculum contribute to familiarizing the students with the following:					
a. social system in Islam?	5	4	3	2	1
b. political system in Islam?	5	4	3	2	1
c. economic system in Islam?	5	4	3	2	1
d. integrated educational system in Islam?	5	4	3	2	1
22. To what extent did the Islamic Education Curriculum succeed in utilizing the media, information, and examples which help achieve its objectives?	5	4	3	2	1

PART II
SECTION A 2: CURRICULUM CONTENT
ARABIC LANGUAGE - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Arabic Language Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each of the statements by indicating your judgement as to the success of the Omani Arabic Language Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1.	To what extent were the educational objectives of the Sultanate taken into consideration when setting the content of the Arabic Language Curriculum for the Secondary School Level?	5	4	3	2	1
2.	To what degree do you think the units of the Arabic Language Curriculum contribute to the achievement of the objectives of Arabic Language at this level?	5	4	3	2	1
3.	To what degree are the numbers of weekly hours allocated for teaching the Arabic Language at your grade level sufficient for the attainment of objectives at:					
	a. Grade I Secondary?	5	4	3	2	1
	b. Grade II Secondary?	5	4	3	2	1
	c. Grade III Secondary?	5	4	3	2	1
4.	To what extent does the Arabic Language Curriculum encourage and assist students to participate in extra-curricular activities such as contests, seminars, clubs, and exhibitions?	5	4	3	2	1

5. To what extent is there an integration between units of Arabic Language Curriculum at Secondary Level and those in the Primary and Preparatory Curricula?	5	4	3	2	1
6. To what extent does the Arabic Language Curriculum for the Secondary Level encourage the use of :					
a. modern educational media?	5	4	3	2	1
b. individual educational activities?	5	4	3	2	1
c. group educational activities?	5	4	3	2	1
7. To what extent is the content of the Arabic Language Curriculum at the Secondary Level flexible to allow the teacher to express his culture and experience and to give topics full coverage scientifically and culturally?	5	4	3	2	1
8. To what extent does the Arabic Language Curriculum help the students to achieve language skills in the following grades:					
a. Grade I Secondary?	5	4	3	2	1
b. Grade II Secondary?	5	4	3	2	1
c. Grade III Secondary?	5	4	3	2	1
9. Some educators regard the function of the curriculum as not only educational, but also cultural and disciplinary. To what extent does this philosophy apply to the content of the Arabic Language Curriculum at Secondary Level?	5	4	3	2	1
10. To what extent does the academic curricular content of Arabic Language permit organization of the subject-matter structure sequentially, logically, and psychologically?	5	4	3	2	1
11. To what extent does the Arabic Language Curriculum allow for integrating current developments in the scientific and knowledge domains that are relevant to the content at this level in order to improve classroom learning?	5	4	3	2	1

12. To what extent does the content of the Arabic Language Curriculum inculcate different aspects such as : concepts, skills, interests, norms, attitudes, appreciation, and methods of thinking? 5 4 3 2 1

13. To what degree do you see that the content of the Arabic Language Curriculum in all its units is adequate in preparing Secondary Level students for the following:

    a. university studies? 5 4 3 2 1

    b. studying at higher institutes? 5 4 3 2 1

    c. life situations? 5 4 3 2 1

14. To what extent did the authors of the Arabic Language Curriculum content show clearly the following:

    a. local environment? 5 4 3 2 1

    b. national environment? 5 4 3 2 1

    c. Islamic environment? 5 4 3 2 1

    d. social environment? 5 4 3 2 1

15. To what extent did Arabic Language Curriculum designers consider the following:

    a. the past cultural heritage of the Sultanate of Oman? 5 4 3 2 1

    b. modern Omani developments? 5 4 3 2 1

16. To what degree do you see that the curriculum content allowed for individual differences among students in :

    a. Grade I Secondary? 5 4 3 2 1

    b. Grade II Secondary? 5 4 3 2 1

    c. Grade III Secondary? 5 4 3 2 1

17. To what extent do you agree on the soundness of the scientific aspect in the content of the Arabic Language Curriculum at the Secondary Level in the following areas:

a. reading?	5	4	3	2	1
b. literary texts?	5	4	3	2	1
c. critique and eloquence?	5	4	3	2	1
d. history of literature?	5	4	3	2	1
e. grammar and inference?	5	4	3	2	1
f. poetic rhythm?	5	4	3	2	1

18. To what extent did the following Arabic Language Units contribute to providing Secondary Level students with analytical capabilities in each of the following:

a. reading?	5	4	3	2	1
b. literary texts?	5	4	3	2	1
c. critique and eloquence?	5	4	3	2	1
d. history of literature?	5	4	3	2	1
e. grammar and inference?	5	4	3	2	1
f. poetic rhythm?	5	4	3	2	1

19. To what extent did reading topics in Secondary Level classes help develop the reading skills in the following ways:

a. speed reading without making mistakes?	5	4	3	2	1
b. understanding of oral reading?	5	4	3	2	1
c. correct pronunciation?	5	4	3	2	1
d. appreciation and aesthetic perception of reading material?	5	4	3	2	1
e. ability to critique and to judge reading material?	5	4	3	2	1

20. To what extent is assessment of student achievement made in terms of success in meeting objectives specified by the curriculum in the following:

a. application to students' developmental characteristics and needs?	5	4	3	2	1
b. suitability to the students' abilities and capabilities?	5	4	3	2	1
c. relation to students' experience in their daily lives?	5	4	3	2	1
d. related to the students' daily lives?	5	4	3	2	1
e. variety in topics and scope?	5	4	3	2	1
f. realization of students' functional level?	5	4	3	2	1

21. To what extent was horizontal integration and continuity realized among curriculum topics of Arabic Language in the following classes:

a. Grade I Secondary?	5	4	3	2	1
b. Grade II Secondary?	5	4	3	2	1
c. Grade III Secondary?	5	4	3	2	1

22. To what extent was vertical integration and continuity achieved among curriculum units of Arabic Language in the three class levels:

a. Grade I Secondary?	5	4	3	2	1
b. Grade II Secondary?	5	4	3	2	1
c. Grade III Secondary?	5	4	3	2	1

23. To what extent were the following taken into consideration in selecting curriculum content in Arabic Language at the Secondary Level:

a. logical scope and sequence in quantity?	5	4	3	2	1
b. logical scope and sequence in quality?	5	4	3	2	1

24. To what extent were the readings for Secondary Level classes varied and covered all aspects and domains necessary for the student's cultural, religious, social, and economic growth? 5 4 3 2 1

25. To what extent were the following criteria considered in selecting reading topics in Secondary Level classes:

    a. hierarchical gradation in quantity of topics for Grade III? 5 4 3 2 1

    b. hierarchical gradation in quality of topics for Grade III? 5 4 3 2 1

    c. relevance to contemporary spirit and modern technological progress? 5 4 3 2 1

    d. inculcation of topics that represent the originality and culture of the past? 5 4 3 2 1

26. To what extent did the Arabic Language Curriculum content in different units help:

    a. motivate students to read independently? 5 4 3 2 1

    b. enrich students' vocabulary? 5 4 3 2 1

    c. enhance the students' culture and expand their perceptions? 5 4 3 2 1

    d. students' acquisition of skill in oral and written expression? 5 4 3 2 1

    e. create social situations to teach language? 5 4 3 2 1

    f. stimulate the motivation to learn in students? 5 4 3 2 1

27. To what extent is the balance between prose and poetry texts realized in setting content of the curriculum in the following classes:

    a. Grade I Secondary? 5 4 3 2 1

    b. Grade II Secondary? 5 4 3 2 1

    c. Grade III Secondary? 5 4 3 2 1

28. To what degree do the selected literary texts in the three secondary level classes help develop the skills of literary oriented students and encourage them to practice these skills? 5 4 3 2 1

29. To what extent do you see that the selected literary texts contribute to :

    a. development of appreciation? 5 4 3 2 1

    b. development of imagination to stimulate visualization and creativity? 5 4 3 2 1

    c. acquiring self-enjoyment? 5 4 3 2 1

    d. development of abilities to critique, balance, and make literary judgements? 5 4 3 2 1

30. To what degree do you see the content of the literary text curriculum appropriate in quantity and quality to students' level in the following classes:

    a. Grade I Secondary? 5 4 3 2 1

    b. Grade II Secondary? 5 4 3 2 1

    c. Grade III Secondary? 5 4 3 2 1

31. To what degree do you feel the content of the literary text curriculum is good as to the:

    a. distribution of the terms and topics among the three classes? 5 4 3 2 1

    b. diversity of topics and literature in the three classes? 5 4 3 2 1

32. To what extent was representation of Omani culture and literature achieved when selecting content of literary texts in the following classes:

    a. Grade I Secondary? 5 4 3 2 1

    b. Grade II Secondary? 5 4 3 2 1

    c. Grade III Secondary? 5 4 3 2 1

33. To what extent was representation of Omani environment and literature realized in the curriculum content in the following language branches:

    a. reading? 5 4 3 2 1

    b. literary texts? 5 4 3 2 1

    c. critique and eloquence? 5 4 3 2 1

    d. history of literature? 5 4 3 2 1

    e. grammar and inference? 5 4 3 2 1

34. To what extent was balance among different literary periods realized when selecting content of literary text in the Secondary Level? 5 4 3 2 1

35. To what degree do you perceive that the amount of literary texts in each class sufficient to differentiate between :

    a. thought characteristics of the periods it represents? 5 4 3 2 1

    b. artistic characteristics of the periods it represents? 5 4 3 2 1

36. To what extent was the functional aspect of the language realized, and selected literary texts benefited from the students' daily life situations? 5 4 3 2 1

37. To what degree do you feel that the selected literary texts are appropriate for students' language skills and standards in the following classes:

    a. Grade I Secondary? 5 4 3 2 1

    b. Grade II Secondary? 5 4 3 2 1

    c. Grade III Secondary? 5 4 3 2 1

38. To what degree do you see that the content of the grammar and inference curriculum realizes the desired language skills in the following classes:

    a. Grade I Secondary? 5 4 3 2 1

    b. Grade II Secondary? 5 4 3 2 1

    c. Grade III Secondary? 5 4 3 2 1

39. To what degree do you agree that the content of grammar and inference should include several pages from the dictionary of etymology "Muj'am Al ma'ani" so that it contributes in theof linguistic inference with Grade III Secondary students? 5 4 3 2 1

40. To what degree do you agree that the content of inflection and grammar curriculum in Secondary Level units be organized in a system inculcating similarities and isotopes appropriate to the standards of students at this level? 5 4 3 2 1

41. To what degree do you feel following topics should be excluded from the content of grammar curriculum:

    a. sentences that cannot be parsed? 5 4 3 2 1

    b. sentences that can be parsed? 5 4 3 2 1

    c. meanings of some letters (harf)? 5 4 3 2 1

    d. moduling? 5 4 3 2 1

    e. nominative pronoun? 5 4 3 2 1

    f. separating pronoun? 5 4 3 2 1

    g. conjuctive and disjunctive "hamza"? 5 4 3 2 1

42. To what degree do you agree on increasing definitions and categorization in the following eloquence topics:

    a. similarizing? 5 4 3 2 1

    b. exclamations for eloquence purposes? 5 4 3 2 1

    c. forwarding? 5 4 3 2 1

    d. omitting? 5 4 3 2 1

43. To what extent do you feel that the content of the Critique Curriculum in Grades I and III help to differentiate between:

    a. characteristics of poetic arts? 5 4 3 2 1

    b. characteristics of prose arts? 5 4 3 2 1

    c. characteristics of different literary schools? 5 4 3 2 1

44. Some educators believe the content of the present eloquence ("Balagha") curriculum as it is presented in the Secondary Level leads to its standstill and confinement in frames, terms and categories, which define its separation from literary studies and departs from its real scope and function. To what degree do you agree with this opinion? 5 4 3 2 1

45. To what extent was the content of Critique and Eloquence ("Balagha") in Secondary Level attached to modern literature as it is closer to the student's contemporary life and immediate experience? 5 4 3 2 1

46. To what degree do you see that the Critique and Eloquence Curriculum emphasized a general abstraction that stimulates the intellect of the student? 5 4 3 2 1

47. To what degree do you agree that study of Critique and Eloquence in Grade I be deleted although students in this grade need these skills for studying, analyzing, and critiquing literary texts? 5 4 3 2 1

48. To what degree do you feel that the content of poetic rhythm "Urud" in Grades II and III (literary) are adequate to realize the objectives of the curriculum? 5 4 3 2 1

49. To what extent do you agree with deleting of poetic rhythm "Urud" from Grades II and III in the scientific section? 5 4 3 2 1

50. To what extent do you feel that students benefit from the literary section in Grades II and III from studying poetic the rhythms course "Urdu"? 5 4 3 2 1

51. To what degree is the content of the Critique and Eloquence Curriculum appropriate for linguistic and intellectual levels for students at this level? 5 4 3 2 1

52. To what degree are the topics of the History of Literature in Grade III Secondary in vertically integrated and coordinated with those in Grade II Secondary? 5 4 3 2 1

53. To what degree do you feel that the curriculum content of the History of Literature has a logical gradation in construction and sequence? 5 4 3 2 1

54. To what degree is the selected content of the History of Literature through different time periods adequate in giving a clear vision of:

    a. development of literature across different periods? 5 4 3 2 1

    b. literary phenomena in connected periods? 5 4 3 2 1

    c. intellectual and artistic characteristics in periods of study? 5 4 3 2 1

55. To what degree do you feel the content of the History of Literature and Literary Auto-biography at the Secondary Level are sufficient for :

    a. enriching students' perceptions and outlook on life? 5 4 3 2 1

    b. students' understanding of life and interpretation of its events? 5 4 3 2 1

56. To what extent do you agree that the content of the History of Literature Curriculum has encompassed all literary phenomena in the different periods studied? 5 4 3 2 1

57. To what degree has the curriculum content of the History of Literature - prose and poetry- achieved balance in selected topics so that the studies give sound judgement on the history of literature in different periods? 5 4 3 2 1

58. To what degree do you feel the present content distribution of the History of Literature Curriculum should be deleted from Grade I Secondary? 5 4 3 2 1

59. To what extent do you feel that the Literary Autobiographies Curriculum contributes to leading students to famous literary characters in the present day world of literature? 5 4 3 2 1

60. To what degree do you perceive that Literary Autobiographies Curriculum draws a clear illustration of :

    a. status of the autobiographer among his literary contemporaries? 5 4 3 2 1

    b. his artistic and intellectual characteristics? 5 4 3 2 1

61. To what degree do you see that the History of Literature and Literary Autobiographies Curriculum contribute to students' use of literary resources and references? 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
ENGLISH LANGUAGE - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's English Language Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani English Language Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. To what extent were the long-term goals taken into consideration when setting the criteria for selecting and organizing the contents of the English Language Curriculum?..... 5 4 3 2 1

2. To what extent are the number of periods allocated for teaching the English Language Curriculum sufficient to realize the desired goals for the following:

   a. the 1S level students (6 periods per week)?..... 5 4 3 2 1

   b. the 2S and 3S Arts students (8 periods per week)?..... 5 4 3 2 1

   c. the 2S and 3S Science students (6 periods per week)?..... 5 4 3 2 1

3. To what extent does the content of the English Language Curriculum that you teach reflect an Omani cultural orientation?..... 5 4 3 2 1

4. To what degree does the English Language Curriculum of the classes you teach encourage the students to engage in extra-curricular activities, e.g., clubs and contests..... 5 4 3 2 1

5. To what extent is there integration of the English Language Curriculum in the Primary, Preparatory, and Secondary Schools?..... 5 4 3 2 1

6. To what extent is there integration of the English Language Curriculum and the other subjects' curricula:

   a. English and Islamic Studies?..... 5 4 3 2 1

   b. English and Arabic Language?..... 5 4 3 2 1

   c. English and Mathematics?..... 5 4 3 2 1

   d. English and Science?..... 5 4 3 2 1

   e. English and Social Studies?..... 5 4 3 2 1

7. To what extent is English Language remediation required for Omani secondary students?..... 5 4 3 2 1

8. The Secondary English Language Curriculum for 2S and 3S students is designed for both the Arts and Science groups. To what extent do the core materials reflect the interest of:

   a. the Arts groups?..... 5 4 3 2 1

   b. the Science groups?..... 5 4 3 2 1

9. To what degree does the English Language Curriculum content encourage the students to think creatively and to be independent thinkers?..... 5 4 3 2 1

10. To what extent does the English Language Curriculum encourage the students to develop the basic skills necessary for rational thought - namely :

   a. <u>deductive reasoning</u>: applying general principles to special cases?..... 5 4 3 2 1

   b. <u>inductive reasoning</u>: deriving a general principle or basis from special cases?..... 5 4 3 2 1

11. To what extent is the English Language Curriculum flexible enough to permit all English language teachers to input their individual cultural experiences?..... 5 4 3 2 1

12. To what degree is the vocabulary introduced at each grade of the Secondary Level of the English Language Curriculum:

    a. quantitatively sufficient to attain the goals of the English Language Curriculum?..... 5 4 3 2 1

    b. too difficult for the students' cultural and cognitive level?..... 5 4 3 2 1

13. To what extent does the English Language Curriculum content cover specialized vocabulary and topics from a multitude of language domains to enable the student to communicate effectively in respect to :

    a. the personal domain?..... 5 4 3 2 1

    b. the social domain?..... 5 4 3 2 1

    c. the national domain?..... 5 4 3 2 1

    d. the international domain?..... 5 4 3 2 1

    e. the scientific domain?..... 5 4 3 2 1

    f. the literary and cultural domain?..... 5 4 3 2 1

    g. the geo-political domain?..... 5 4 3 2 1

14. To what extent IS "formal grammar" covered in the Secondary English Language Curriculum:. 5 4 3 2 1

15. To what extent do you think that "formal grammar" should be covered in the Secondary English Language Curriculum?..... 5 4 3 2 1

16. To what extent is the grammar introduced at the Secondary Level of the English Language Curriculum":

    a. mechanistic?..... 5 4 3 2 1

    b. thought-provoking?..... 5 4 3 2 1

17. To what extent does the workbook "Writing Tasks" help the English language students to develop useful writing skills?..... 5 4 3 2 1

18. To what extent are English language class cassettes useful to teachers and students in:

    a. providing good pronunciation models?..... 5 4 3 2 1

    b. promoting and practicing listening comprehension?..... 5 4 3 2 1

    c. presenting difficult materials such as dialogues and songs?..... 5 4 3 2 1

19. To what extent are the students encouraged to borrow or make their own copies of the English language class cassettes so that they may practice on their own at home?..... 5 4 3 2 1

20. To what extent do the English language class cassettes present problems; in that, the listening passages:

    a. are too long?..... 5 4 3 2 1

    b. are spoken too rapidly?..... 5 4 3 2 1

    c. are too complex?..... 5 4 3 2 1

    d. present an unsuitable topic?..... 5 4 3 2 1

    e. must be played more than <u>twice</u> before there is any comprehension?..... 5 4 3 2 1

21. To what extent are films and videos used in achieving the goals of the English Language Curriculum?..... 5 4 3 2 1

22. To what extent are the English language study texts useful in:

    a. improving the student's silent reading speed and comprehension?..... 5 4 3 2 1

    b. providing contextual examples of new structural and functional language?..... 5 4 3 2 1

c. increasing the student's vocabulary?..... 5 4 3 2 1

d. offering materials for listening and discussion as well as controlled oral and written work?..... 5 4 3 2 1

23. To what extent are the "Reading for Information Texts" in the English Language Curriculum useful in :

a. simulating articles and stories from newspapers or magazines?..... 5 4 3 2 1

b. encouraging students' rapid silent reading of quite difficult texts for extracting the main points and factual information?..... 5 4 3 2 1

24. To what extent are the "Check Your Understanding" exercises in the English Language Curriculum useful for checking the student's understanding of the Serial Story?..... 5 4 3 2 1

25. To what extent are the "Reading Passages" in the Secondary English Language Curriculum sufficiently authentic and up-to-date?..... 5 4 3 2 1

26. To what extent would you rate the "Reading for Pleasure" passages at the secondary level of the English Language Curriuclum as effective in "inducing pleasurable reading"?.. 5 4 3 2 1

27. To what extent is the English Language Curriculum component "Paul's Tall Stories" understood by and beneficial to Omani students?..... 5 4 3 2 1

28. To what extent is it desirable "to chunk":

a. listening passages?..... 5 4 3 2 1

b. reading passages?..... 5 4 3 2 1

29. To what extent do the "tasks" (as suggested in the teacher's manuals and student's books of the English Language Curriculum) lead to better understanding of the "Reading Passages" by the students?..... 5 4 3 2 1

30. To what extent is the "anaphoric reference" a useful technique to:

    a. teach reading?..... 5 4 3 2 1

    b. test reading?..... 6 4 3 2 1

31. To what extent is the "cloze" methodology effective in the English Language Curriculum as:

    a. cloze passages for teaching?..... 5 4 3 2 1

    b. cloze tests?..... 5 4 3 2 1

32. To what extent does the Secondary English Language Curriculum provide students with sufficient basic competence to be able to use English in their lives and work as the need arises:

    a. in reading?..... 5 4 3 2 1

    b. in writing?..... 5 4 3 2 1

    c. in listening?..... 5 4 3 2 1

    d. in speaking?..... 5 4 3 2 1

    e. in comprehension?..... 5 4 3 2 1

33. To what extent are the various skills areas integrated in the Secondary English Curriculum?..... 5 4 3 2 1

34. To what extent does the English Language Curriculum content enable the students to master the following skills:

    a. understand continuous speech of three minutes' duration at a near native-speaker speed of delivery on a familiar topic?..... 5 4 3 2 1

    b. follow the logical sequences of an argument on a common topic?..... 5 4 3 2 1

    c. comprehend telephone conversations making arrangements or requesting information?..... 5 4 3 2 1

d. follow the main points of an English language news broadcast on local television?..... 5 4 3 2 1

e. interrupt and ask questions during a short lecture or informal talk?..... 5 4 3 2 1

f. agree or disagree with a fluent speaker in an informal situation?..... 5 4 3 2 1

g. express facts and opinions in a clear, logical sequence?..... 5 4 3 2 1

h. summarize materials read at the level of the English language course book?..... 5 4 3 2 1

i. converse with a fluent speaker on topics relating to his/her experience?..... 5 4 3 2 1

j. skim extended texts and extract important and relevant information?..... 5 4 3 2 1

k. distinguish fact from opinion?..... 5 4 3 2 1

l. deduce the meaning of a passage in which only 80% of the vocabulary is familiar?.... 5 4 3 2 1

m. read handwritten social and business letters?..... 5 4 3 2 1

n. read and understand telexes?..... 5 4 3 2 1

o. read and understand instruction manuals, such as car manuals or hair dryer leaflets?..... 5 4 3 2 1

p. read timetables, tourist information, and simple street maps?..... 5 4 3 2 1

q. read the daily newspaper with comprehension?..... 5 4 3 2 1

r. write short social or business letter in the appropriate tone and form?..... 5 4 3 2 1

s. write logically coherent narrative prose of 200 to 300 words?..... 5 4 3 2 1

t. write instructions and short reports?..... 5 4 3 2 1

u. summarize the main points of a talk or written text at grade level?..... 5 4 3 2 1

v. develop library skills to locate books, look up words in a dictionary, and extract relevant information from a reference book?..... 5 4 3 2 1

w. read for enjoyment a novel appropriate to the grade level of the student?..... 5 4 3 2 1

35. To what extent does the Secondary English Language Curriculum prepare students for life after school to :

a. study at Sultan Qaboos University or universities abroad?..... 5 4 3 2 1

b. obtain jobs in the Omani national private sector?..... 5 4 3 2 1

c. obtain jobs in the Omani government sector?..... 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
MATHEMATICS - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Mathematics Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each of the statements by indicating your judgement as to the success of the Omani Mathematics Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the contents of the Secondary Mathematics Curriculum?	5	4	3	2	1
2. To what extent are the number of weekly hours allocated for teaching curriculum sufficient for realizing the desired goals of the Mathematics Curriculum?	5	4	3	2	1
3. To what extent does the Mathematics Curriculum encourage students to participate in extracurricular scholastic activities, such as contests, clubs, and science fairs?	5	4	3	2	1
4. To what extent is there vertical integration of the Mathematics Curriculum content in the Primary, Preparatory, and Secondary Levels?	5	4	3	2	1
5. To what extent is there integration and continuity of the Mathematics Curriculum in the Primary, Preparatory, and Secondary Levels?	5	4	3	2	1

6. To what extent is there integration of the Mathematics Curriculum and other subjects' curricula of the same level? 5 4 3 2 1

7. To what extent does the Mathematics subject-matter help students develop the attitudes and habits essential for logical thinking:

   a. inductive reasoning: integrating the rules governing special cases and problems to arrive at a general rule? 5 4 3 2 1

   b. deductive reasoning: applying general principles to a specific situation or case? 5 4 3 2 1

8. To what extent does the Mathematics Curriculum encourage the students to develop attitudes and basic skills necessary for critical thinking:

   a. suspending judgement? 5 4 3 2 1

   b. testing the accuracy of data? 5 4 3 2 1

   c. evaluating sources of data? 5 4 3 2 1

   d. utilizing various sources of information? 5 4 3 2 1

9. To what extent does the Mathematic Curriculum at the Secondary Level use different instructional media? 5 4 3 2 1

10. To what extent does the curriculum allow the students to perform different activities in order to strengthen mathematical concepts? 5 4 3 2 1

11. To what extent did the curriculum allow you to benefit from feedback? 5 4 3 2 1

<u>Mathematical Construction</u>

12. To what degree do you feel that evaluation measurements for different units of Mathematics at the Secondary Level were appropriate? 5 4 3 2 1

13. To what extent did the Mathematics Curriculum at the Secondary Level contribute to student's acquisition of different points of view that would make him able to :

    a. deduce generalizations and re-confirm the soundness of his deductions? 5 4 3 2 1

    b. integrate concepts included in the generalizations? 5 4 3 2 1

14. To what extent did the Mathematics Curriculum at the Secondary Level emphasize the student's understanding of logarithms before stressing the required skill? 5 4 3 2 1

15. To what extent did the Secondary Mathematics Curriculum consider acquisition of skills related to:

    a. interpretation of charts and graphs? 5 4 3 2 1

    b. skills of drawing operations flow charts? 5 4 3 2 1

Mathematical Procedures

16. To what extent did the Secondary Mathematics Curriculum consider principles of logic in deducing mathematical theories in the three grades? 5 4 3 2 1

17. To what extent does the Secondary Mathematics Curriculum consider inductive procedures in students' acquisition of mathematical knowledge? 5 4 3 2 1

Learning and Teaching Mathematics

18. To what extent did the curriculum contribute to the realization of self-learning principles through :

    a. encouragement of presenting cases which student analyzes and arrives at generalizations by himself? 5 4 3 2 1

    b. encouragement of the extra-curricular mathematics activities? 5 4 3 2 1

c. develop desire to continue studying mathematics? 5 4 3 2 1

19. To what extent does Secondary Mathematics Curriculum allow employment of mathematical information in the student's daily life so as to provide the motivation for further learning? 5 4 3 2 1

Mathematical Usages

20. To what extent did the Secondary Mathematics Curriculum encourage students to study mathematics and develop positive attitudes towards:

a. continuation of mathematical studies? 5 4 3 2 1

b. use in daily problem solving ? 5 4 3 2 1

c. assist in understanding other fields of knowledge? 5 4 3 2 1

The Omani Secondary Level Mathematics Curriculum consists of several units for each grade as follows:

Grade 1 Secondary

21. To what extent does the time schedule (6 weekly hours) accommodate the curriculum content of Grade 1 Secondary? 5 4 3 2 1

22. To what extent could the Logic Unit in Mathematics be considered appropriate for Grade 1 Secondary from the following aspects:

a. concepts, terminologies, and symbolization? 5 4 3 2 1

b. generalizations? 5 4 3 2 1

c. algorithms and skills? 5 4 3 2 1

d. exercises and applications? 5 4 3 2 1

23. To what extent is there cohesion between units of "correlations and functions" and material previously studied at the Preparatory Level? 5 4 3 2 1

24. To what degree do you feel you need algebra of sets in teaching Secondary Grade 1 Curriculum so that they can be employed in the unit of probability? 5 4 3 2 1

25. To what degree were student's responses to the curriculum's demonstrations of each of the following:

a. non-congruency (inequality) relations?	5	4	3	2	1
b. congruency relations?	5	4	3	2	1
c. part-sequential relations?	5	4	3	2	1
d. full sequential relations?	5	4	3	2	1

26. To what degree do you consider the importance of the following being included in the curriculum:

a. partition?	5	4	3	2	1
b. classes of equivalence?	5	4	3	2	1

27. To what extent did the Secondary Grade 1 Mathematics Curriculum contribute to students' acquisition of accuracy in applying the algorithms to transfer from one number systems to another?	5	4	3	2	1
28. To what degree do you feel that solid geometry in Grade 1 Secondary is sufficient to make the student capable of visualizing forms in space?	5	4	3	2	1
29. To what degree are prismatic and solid models applied in teaching solid geometry?	5	4	3	2	1
30. To what extent do you feel it is appropriate to start teaching probability in Grade 1 Secondary?	5	4	3	2	1

Grade 2 Science Section

31. To what degree do you feel that the curriculum teaching plan (8 weekly hours) is appropriate?	5	4	3	2	1

32. To what degree do you feel that the topic limits of progression in Grade 2 Scientific should:

a. remain as it is?	5	4	3	2	1
b. be raised to higher level?	5	4	3	2	1
c. be deleted?	5	4	3	2	1

33. To what degree do you feel that the Ring Theory should :

    a. remain as it is? 5 4 3 2 1

    b. be deleted? 5 4 3 2 1

34. To what extent does the Secondary Mathematics Curriculum succeed in presenting the unit of complex numbers? 5 4 3 2 1

35. To what extent does the geometry part of the Matehmatics Curriculum of Class II Secondary succeed in demonstrating the following units:

    a) analytic geometry (the circle)? 5 4 3 2 1

    b) vectors? 5 4 3 2 1

    c) trigonometric functions? 5 4 3 2 1

36. To what extent is there coherence between algebra and geometry in Grade 2 Secondary? 5 4 3 2 1

37. To what degree do you feel that the structure of Algebra in Grade 2 Secondary is logically sound in the sequence of its items and units? 5 4 3 2 1

38. To what degree do you feel there is wider scope in the present unit of geometry of transformations to what was previously studied by the student in preparatory level? 5 4 3 2 1

    <u>Grade 3 Science Section</u>

39. To what degree do you feel that curriculum-teaching plan for Grade 3 Science Section (8 weekly hours) is sufficient? 5 4 3 2 1

40. To what degree do you see that introduction to limits and continuity is appropriate? 5 4 3 2 1

41. To what degree do you agree that teaching the definition of the limit at a point is important? 5 4 3 2 1

42. To what degree do you see the student has benefited from studying derivatives in differentiation applications?	5	4	3	2	1
43. To what degree is there integration in the curriculum among maxima, regression, and inflection points in the curve of a function f (x)?	5	4	3	2	1
44. To what degree do you feel there is logical sequence in topics of the unit on differentiation?	5	4	3	2	1
45. To what degree are the present theories included in the curriculum important for Grade 3 Scientific?	5	4	3	2	1
46. To what extent is the unit of conical sections integral to what has been studied in Analytic Geometry, and geometry of transformations?	5	4	3	2	1
47. To what degree do you feel that partition is a good introduction to integration?	5	4	3	2	1
48. To what degree do you feel that the curriculum has achieved objectives of teaching functions topics?	5	4	3	2	1
49. To what degree do you feel that integrability (Reman test) of function is appropriate to students abilities and should :					
a) stay as it is?	5	4	3	2	1
b) be deleted completely?	5	4	3	2	1
50. To what degree do you feel that complete function is appropriate to student abilities in Grade 3 Science section?	5	4	3	2	1
51. To what degree do you feel that integration applications are sufficient and appropriate (areas and volumes)?	5	4	3	2	1
52. To what extent was the curriculum successful in relating experimental applications of differentiation and integration (calculus)?	5	4	3	2	1

53. To what degree do you feel that the following exist in the Probability Curriculum for Grade 3 Scientific :

    a. topic - sequence? 5 4 3 2 1

    b. no pit-falls? 5 4 3 2 1

54. To what degree do you feel that the Matehmatics Curriculum especially probability in Grade 3 Science section needs the algebra of sets? 5 4 3 2 1

55. To what degree do you feel that probability curriculum is useful to the student in his academic life? 5 4 3 2 1

56. To what degree do you feel that the Statistics Curriculum is integrative in its topics, and the topics are in logical sequence? 5 4 3 2 1

57. To what extent was the curriculum successful in presenting the statistics unit from the following aspects:

    a) percentile and percentile rank? 5 4 3 2 1

    b) actual parameters to classes? 5 4 3 2 1

    c) dispersion and its measures? 5 4 3 2 1

    d) regression and line of regression? 5 4 3 2 1

    e) distribution of averages? 5 4 3 2 1

58. To what degree do you feel there are short comings in the structure of the Calculus Curriculum in the following aspects:

    a) graphical illustrations? 5 4 3 2 1

    b) varieties of examples? 5 4 3 2 1

    c) direct exercises? 5 4 3 2 1

    d) hierarchical and varieties of problems? 5 4 3 2 1

59. To what degree do you feel the absence of some topics - such as partial fractions in Grade 3 Secondary? 5 4 3 2 1

60. To what extent do you agree there are shortcomings in the structure of the Probability Curriculum for Grade 3 Science section? 5 4 3 2 1

61. To what degree do you feel there are shortcomings in the structure of the Statistics Curriculum for Grade 3 Science section? 5 4 3 2 1

62. To what degree do you feel that the addition of the following topics at the Secondary Level are important: partial fractions and mathematical deductions? 5 4 3 2 1

Grade 2 (Art Section)

63. To what extent are the weekly hours allocated for teaching (2 hours) sufficient for realizing the desired goals of the curriculum? 5 4 3 2 1

64. To what degree do you feel that content of the units of powers and logarithms is appropriate in Grade 2 and should :

a) stay as it is? 5 4 3 2 1

b) be deleted? 5 4 3 2 1

65. To what degree do you feel that linear programming is appropriate to the abilities of Grade 2 Literary and should :

a. stay as it is? 5 4 3 2 1

b. be deleted? 5 4 3 2 1

Grade 3 (Art Section)

66. To what degree do you feel that time allotted to teaching Matehmatics to Grade 3 Literary (2 weekly hours) is adequate? 5 4 3 2 1

67. To what extent do you feel that differentiation is important to Grade 3 Literary students? 5 4 3 2 1

68. To what degree do you feel that the topics of probability and statistics are necessary for students? 5 4 3 2 1

69. To what degree is there continuity and integration in the Mathematics Curriculum for Grade 3 Literary?	5	4	3	2	1
70. To what degree do you feel that the Mathematics Curriculum for Grade 3 Literary is lacking for some topics?	5	4	3	2	1
71. To what extent does the Mathematics Curriculum content for Grade 3 Literary achieve individual-learning principles?	5	4	3	2	1

PART II

SECTION A 2: CURRICULUM CONTENT
GENERAL SCIENCE - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's General Science Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani General Science Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1.	To what extent were long-term objectives considered in selecting items that tested the General Science Curriculum content at secondary level?	5	4	3	2	1
2.	To what extent were weekly hours allocated for teaching the General Science Curriculum sufficient to achieve desired objectives in Omani curriculum?	5	4	3	2	1
3.	To what extent does General Science Curriculum for the class you teach emphasize historical aspects of science?	5	4	3	2	1
4.	To what extent does the General Science Curriculum encourage students to participate in specific scientific activities such as: science club, contests, and science fairs?	5	4	3	2	1
5.	To what extent is integration illustrated in the curriculum content of science subject-matter in Grades 2 and 3?	5	4	3	2	1
6.	To what extent is there integration of the curricula content of science subject-matters in primary, preparatory and secondary levels?	5	4	3	2	1

7. To what extent do curriculum content and processes encourage students to understand that scientific information is both a systematic organization of knowledge and a way of thinking? 5 4 3 2 1

8. To what extent are experiments and field studies:

   a. an integrative part of the General Science Curriculum? 5 4 3 2 1

   b. a basic part of the methodology of science education? 5 4 3 2 1

9. To what extent does the Science Curriculum help students' development of the following critical-thinking attitudes and basic habits:

   a. postpone judgement? 5 4 3 2 1

   b. test accuracy of data? 5 4 3 2 1

   c. evaluate data sources? 5 4 3 2 1

   d. use of several information sources? 5 4 3 2 1

10. To what extent does the Science Curriculum help students develop logical thinking skills and the use of this style of thinking concerning the following:

   a. deduction: use and application of a general principle to a group of specific situations and examples? 5 4 3 2 1

   b. induction: inference of a general principle from analysis and case-study of specific? 5 4 3 2 1

11. A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives:

   a. develop student's concern for his natural environment? 5 4 3 2 1

b. help students understand their natural environment and interpret its phenomena?	5	4	3	2	1
c. adapt to continuing changes in the natural environment?	5	4	3	2	1
d. identify natural resources in Arabic environment in general and Oman in particular?	5	4	3	2	1
e. perceive the role that natural resources play in raising the living standard for both the individual and society.	5	4	3	2	1
f. identify dangers and hazards of pollution and how they could participate in protecting their environment from these dangers?	5	4	3	2	1
g. develop desired scientific attitudes toward the following:					
1. open-mindedness and inquisitiveness?	5	4	3	2	1
2. postponing judgement until they have collected all relevant information?	5	4	3	2	1
3. disproving myths and emphasizing cause-effect?	5	4	3	2	1
4. adopting experimental procedures as means of knowledge development?	5	4	3	2	1
5. precise observation?	5	4	3	2	1
6. respect for the opinions of others and readiness to change personal opinion in light of new information?	5	4	3	2	1
7. cooperation and ability of individual to work in a group?	5	4	3	2	1
8. independence in thinking in work?	5	4	3	2	1
h. learning scientific-method thinking and developing habit of using this method in solving everyday problems?	5	4	3	2	1
i. develop students' appreciation and respect for manual work and its role in social progress?	5	4	3	2	1

j. develop students' appreciation of the efficiency of the universe as a system and to appreciate the natural beauty that affects the greatness of the Almighty God? 5 4 3 2 1

k. discover and develop creative abilities of the students? 5 4 3 2 1

l. discover and develop scientific attitude of the students? 5 4 3 2 1

m. develop the proper hygiene habits that enhance their natural physical growth through:

1. identifying the various parts of the body and how they function to achieve physical growth? 5 4 3 2 1

2. identifying the proper nutritional habits and rules to protect themselves against diseases? 5 4 3 2 1

n. develop scientific reading habits as a way of self-learning? 5 4 3 2 1

o. develop manipulative skills through using standard equipment and also through designing and making simple tools and equipment needed to study science? 5 4 3 2 1

12. Several independent units of biology, geology, physics, and chemistry are included in the General Science Curricula of Grades 2 and 3 Secondary. To what degree do you feel that this process of educational material organization supplies the student with the integrative scientific knowledge required? 5 4 3 2 1

13. To what degree do you feel that the General Science Curriculum for grades 2 and 3 encourages the development of the following skills:

a. fondness for and preference of study of science? 5 4 3 2 1

b. application of knowledge to everyday life situations? 5 4 3 2 1

c. manipulation and implementation of instruments and appartus? 5 4 3 2 1

d. develop science-consciousness in enriching man's life? 5 4 3 2 1

e. appreciate the role of scientists in general and Muslim scientists in particular in the progress of human society? 5 4 3 2 1

14. To what degree do you feel that the Science Curriculum for Grades 2 and 3 is appropriate for the intellectual maturity standard of students concerning the following:

a. amount of scientific knowledge? 5 4 3 2 1

b. degree of difficulty in treating it? 5 4 3 2 1

c. degree of specialization of scientific knowledge as independent topics : biology, chemistry, physics, geology,and astronomy? 5 4 3 2 1

d. time allocated to science education in each grade of this level? 5 4 3 2 1

e. standard of handling & manipulation of apparatus and equipment necessary for studying these subject-matters? 5 4 3 2 1

f. degree of cognitive skills necessary to understand and comprehend scientific knowledge inculcated in the curriculum? 5 4 3 2 1

15. To what degree do you feel the following concepts for Grades 2 and 3 are appropriate for the cognitive level of students and class:

<u>First - Grade 2 (Arts Section)</u>

Unit 1: Science and Scientists

1. Science structure

a. Scientific material (knowledge structure of science)? 5 4 3 2 1

b. Methodology of scientific thinking? 5 4 3 2 1

2. Characteristics of science?	5	4	3	2	1
3. Scientific processes?	5	4	3	2	1
4. Employment of scienitifc thinking in solution of everyday problems?	5	4	3	2	1
Unit 2: Evolution of Astronomy					
1. Astronomy in ancient times?	5	4	3	2	1
2. Origin of the universe?	5	4	3	2	1
3. Stars and their properties?	5	4	3	2	1
4. Stars grouping?	5	4	3	2	1
5. Scientists' views about stars?	5	4	3	2	1
6. Solar system?	5	4	3	2	1
7. Some astronomical phenomena in space?	5	4	3	2	1
8. Finding directions by stars and compass?	5	4	3	2	1
Unit 3: Transportation					
1. Means of land transportation?	5	4	3	2	1
2. Means of sea transportation?	5	4	3	2	1
3. Means of air transportation?	5	4	3	2	1
Unit 4: Communication					
Cables, telephones, radios, televisions, radar, and satellites?	5	4	3	2	1
Unit 5: Science and Human Health					
1. Effect of disease in the individual and society?	5	4	3	2	1
2. Immunity and disease prevention?	5	4	3	2	1
3. Effect of science in discovering and treating contagious diseases?	5	4	3	2	1
4. Diseases resulting from the malfunction of one of body organs?	5	4	3	2	1
5. Contagious diseases?	5	4	3	2	1

Unit 6: Science and the World Food Problem

1. Importance of nutrition to man's body?	5	4	3	2	1
2. World-food problems?	5	4	3	2	1
3. Causes of food problems?	5	4	3	2	1
4. The role of technology in the solution of food problem					
a. horizontal expansion in agriculture?	5	4	3	2	1
b. vertical expansion in agriculture?	5	4	3	2	1
c. increasing animal proteins?	5	4	3	2	1
d. manufacturing and preserving agricultural products?	5	4	3	2	1
e. artificial meat?	5	4	3	2	1

Second - Grade 3 (Arts Section)

Unit 1: Oil

1. Discovery of oil and its uses?	5	4	3	2	1
2. Theories of oil formation?	5	4	3	2	1
3. Oil explorations?	5	4	3	2	1
4. Oil work problems?	5	4	3	2	1
5. Means of oil transport?	5	4	3	2	1
6. Oil refineries?	5	4	3	2	1
7. Present importance of oil?	5	4	3	2	1
8. Oil dependent industries?	5	4	3	2	1

Unit 2: Solar Energy

1. Solar radiations reaching the earth?	5	4	3	2	1
2. Indirect solar energy?	5	4	3	2	1
3. Direct solar energy?	5	4	3	2	1
4. Thermal applications of solar radiations?	5	4	3	2	1
5. Electricity from solar radiations?	5	4	3	2	1
6. Futuristic look of producing electricity from solar energy?	5	4	3	2	1

Unit 3: Nuclear Energy

1. Nuclear structure?	5	4	3	2	1
2. Peaceful utilization of radioactive isotopes?	5	4	3	2	1
3. Nuclear fission?	5	4	3	2	1
4. Nuclear fusion?	5	4	3	2	1

Unit 4: Environment and Pollution

1. Man and Environment

a. carbon-cycle in nature?	5	4	3	2	1
b. nitrogen-cycle in nature?	5	4	3	2	1
c. water-cycle in nature?	5	4	3	2	1
d. integration of environmental components?	5	4	3	2	1

2. Contemporary technology and its effects on environment:

a. sea pollution?	5	4	3	2	1
b. bacterial and chemical pollution?	5	4	3	2	1
c. pollution by hard and radioactive substances?	5	4	3	2	1
d. kinds of harmful radiations?	5	4	3	2	1
e. air pollution?	5	4	3	2	1
f. hazards of radioactive pollution to man?	5	4	3	2	1
g. soil pollution?	5	4	3	2	1
h. noise pollution?	5	4	3	2	1

Unit 5: Meteorology and Climate Forecast

1. Meteorology and climate forecast?	5	4	3	2	1
2. Aerosphere?	5	4	3	2	1
3. Meteorologic parameters and their measurements?	5	4	3	2	1

4. Air masses & air fronts? 5 4 3 2 1

5. Cyclons & anticyclons? 5 4 3 2 1

6. Importance of meteorology and climate forecast? 5 4 3 2 1

16. Some new concepts introduced into the secondary curriculum may have raised some disagreements about their appropriateness for grades at this level. Please give your opinion concerning the following curricular topics using the following measurement:

1. appropriate and the concept stays in place

2. easy and to be moved to a lower grade

3. difficult and to be moved to a higher grade

4. higher than the secondary standard and to be moved to university level

5. to be deleted

Grade 2:

a. stars - characteristics and groups? 5 4 3 2 1

b. solar system? 5 4 3 2 1

c. internal combustion engine? 5 4 3 2 1

d. diesel engine? 5 4 3 2 1

e. radio? 5 4 3 2 1

f. cathode-ray tube and television? 5 4 3 2 1

Unit 3:

a. nuclear energy (nuclear fission and nuclear fusion)? 5 4 3 2 1

b. content of earth atmosphere? 5 4 3 2 1

c. atmospheric humidity and its measurement? 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
HISTORY - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's History Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani History Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. The spiral curriculum approach has been used in designing the content of the Omani History Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels.
   To what extent do you feel that the History Curriculum has been successful in expanding the scope and depth of concepts at the secondary level? 5 4 3 2 1

2. To what extent do the curricula of History, Human Culture, and Civic Education realize the following:

   a. needs of student after graduation? 5 4 3 2 1

   b. long-range educational objectives? 5 4 3 2 1

   c. integration with the topics of both the preparatory and secondary levels? 5 4 3 2 1

   d. coherence among topics and logical sequence? 5 4 3 2 1

   e. emphasis on contemporary issues and current events? 5 4 3 2 1

   f. horizontal (parallel) integration among subjects - History, Civic Education and Human Culture? 5 4 3 2 1

3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:

   a. activities and experiences directed towards discovering facts, concepts,and relationships? 5 4 3 2 1

   b. utilizing the environment as a source of learning? 5 4 3 2 1

   c. library reference work and field research? 5 4 3 2 1

   d. training in collection of information through scientific methods? 5 4 3 2 1

   e. using media as educational material? 5 4 3 2 1

4. To what extent does coherence exist between the three curricula (History, Civic, Education, and Human Culture) and each of the following:

   a. Geography? 5 4 3 2 1

   b. Contemporary Problems? 5 4 3 2 1

   c. Islamic Education? 5 4 3 2 1

5. To what extent are the weekly hours allocated for each of the following courses sufficient:

   a. History? 5 4 3 2 1

   b. Civic Education? 5 4 3 2 1

   c. Human Culture? 5 4 3 2 1

6. To what extent do the three curricula (Civic Education, Human Culture, and History) fosters the following educational attitudes:

   a. direct reference to the original texts? 5 4 3 2 1

b. encouragement of independent critical thinking? 5 4 3 2 1

c. satisfaction of applying knowledge to daily life situations? 5 4 3 2 1

d. application of scientific and historic method in research and thinking? 5 4 3 2 1

7. To what extent were the three curricula successful in considering individual and group differences-during activities-between students as individuals and as groups cooperating to achieve objectives? 5 4 3 2 1

8. To what extent did the three curricula consider the needs, objectives, and different problems of the society ? To what extent were solutions to these problems presented? 5 4 3 2 1

9. To what extent did learner's activities help to develop the following attitudes:

a. sound thinking? 5 4 3 2 1

b. interpretation? 5 4 3 2 1

c. rationalization? 5 4 3 2 1

d. analysis? 5 4 3 2 1

e. synthesizing? 5 4 3 2 1

f. forming opinions? 5 4 3 2 1

10. To what extent did the History Curriculum for Grade 1 help the student perceive time and place relationshps and use them as a fundamental core in studying the history of modern Europe? 5 4 3 2 1

11. To what extent does the curriculum give students the opportunity to be aware of the historical events of the modern and contemporary world and various existing political, economic, social, and cultural problems? 5 4 3 2 1

12. To what extent does integration and coherence exist among Grade 1 history topics from European Renaissance to World War II? 5 4 3 2 1

13. To what extent do the textbook topics contribute to covering all aspects of Modern European History? 5 4 3 2 1

14. To what extent is the Arabic culture's influence on Europe's Renaissance in the 15th and 16th centuries and later developments illustrated in the textbooks? 5 4 3 2 1

15. To what extent do curriculum topics illustrate positive influences of European Culture on the Arab World? 5 4 3 2 1

16. To what extent does the curriculum allow students to realize the following:

    a. appreciate artistic, literary, and scientific accomplishments of the European Renaissance? 5 4 3 2 1

    b. take pride in the courageous spirit of resisting European colonialism exhibited by Arabs and muslims in general and Omani in particular? 5 4 3 2 1

17. To what extent were figures, maps, and drawings exhibited in the textbook sufficient to understanding curriculum topics? 5 4 3 2 1

18. To what extent did historical texts in the textbook contribute to generating enthusiasm and stimulating students to study this period, and making the material relevant? 5 4 3 2 1

<u>History : Grade 2 Secondary (Art Section)</u>

19. To what extent are topics of the History Curriculum for Grade 2 secondary (Arts Section) in accordance with the following:

    a. appointed curriculum plan? 5 4 3 2 1

    b. desired objectives of the curriculum? 5 4 3 2 1

20. To what extent do curriculum topics contribute to modifying the following aspects of student behavior:

    a. deepening of faith in Islam? 5 4 3 2 1

    b. taking pride in human and Arabic values? 5 4 3 2 1

    c. cooperation? 5 4 3 2 1

    d. loyalty to Arab and Islamic nation? 5 4 3 2 1

    e. loyalty to Oman? 5 4 3 2 1

21. To what extent was the curriculum successful in treating the following aspects of Islamic Culture: development, origin, illustrations, and characteristics? 5 4 3 2 1

22. To what extent does the curriculum allow the treatment of the following topics:

    a. influence of Islamic Culture in European Culture? 5 4 3 2 1

    b. fighting the Mongol and Crusade dangers? 5 4 3 2 1

    c. spread of Islam in Central and Southern Asia? 5 4 3 2 1

23. To what extent is coherence realized between curricula content of this secondary class and that of Preparatory Grade 2 and Primary Grade 5? 5 4 3 2 1

24. To what extent does the curriculum illustrate fundamental historical origins of Arab and Islamic Unity? 5 4 3 2 1

25. To what extent does the curriculum stimulate students' motivation to read and reference the original sources of the history of the Arab and Islamic Nation? 5 4 3 2 1

26. To what extent do original texts included in topics of curriculum content contribute to practical application and providing proofs that help understanding and interpretation? 5 4 3 2 1

27. To what extent do figures and maps included contribute to understanding and illustrating curriculum topics? 5 4 3 2 1

<u>History : Grade 3 Secondary (Arts Section)</u>

28. To what extent was the History Curriculum for Grade 3 Secondary (Arts Section) successful in covering the following topics:

    a. history of the Arab Gulf before Islam and Islamic Eras? 5 4 3 2 1

    b. history of the Arab Gulf in modern times? 5 4 3 2 1

    c. navigation and sea-life in Islamic Eras? 5 4 3 2 1

    d. history of Abadiyah? 5 4 3 2 1

29. To what extent was the curriculum successful in achieving the general objectives of studying the topic - the History of Oman and the Arab Gulf? 5 4 3 2 1

30. To what extent does the curriculum encourage stimulation of student's motivation to read and reference original sources for studying the History of Oman and the Arab Gulf? 5 4 3 2 1

31. To what extent is coherence and continuity achieved between the History Curricula of Grade 3 secondary and those of Grades 1 and 2 secondary? 5 4 3 2 1

32. As a secondary level History teacher, are you convinced that in order to enrich the content of Grade 3 History (Arts Section) that the following topics related to the history of Oman and the Arab Gulf be included in the curriculum:

    a. navigation and marine life? 5 4 3 2 1

    b. marine natural phenomena in Islam literature? 5 4 3 2 1

    c. observation and measurement instruments? 5 4 3 2 1

    d. natural and marine phenomena, such as tide and ebb and marine currents? 5 4 3 2 1

    e. particular phenomena of vegetation (herbs) in deserts and the winds? 5 4 3 2 1

33. To what extent were the curriculum and its contributions successful in modifying student behavior toward:

    a. loyalty to the Sultanate? 5 4 3 2 1

    b. loyalty to Gulf society and Arab nation? 5 4 3 2 1

    c. understanding history and inferences of historical events based on present methods of availability of data and documentation? 5 4 3 2 1

    d. re-birth of the glory of the past? 5 4 3 2 1

    e. perceiving historic development of the Sultanate of Oman and the Arab Gulf? 5 4 3 2 1

34. To what extent does the curriculum encourage the student to explore and understand the interaction of man with the Omani and Gulf environment?	5	4	3	2	1
35. To what extent are instructional materials related to the curriculum sufficient to clarify concepts and perceptions of time and place dimensions in order to comprehend the history of this region?	5	4	3	2	1
36. To what extent do examples of activities mentioned at the end of every lesson contribute to helping students discover and comprehend facts and concepts?	5	4	3	2	1
37. To what extent was the curriculum successful in training students in the following :					
a. chairing open discussion?	5	4	3	2	1
b. conducting research?	5	4	3	2	1
c. writing reports?	5	4	3	2	1
d. using the school textbook as an important learning source?	5	4	3	2	1

PART II

SECTION A 2: CURRICULUM CONTENT

GEOGRAPHY & CONTEMPORARY PROBLEMS - SECONDARY LEVEL

(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Geography & Contemporary Problems Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Geography & Contemporary Problems Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. The spiral curriculum approach has been used in designing the content of the Omani Geography and Contemporary Problems Curriculum. This means that a group of concepts are treated at the primary and secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Geography & Contemporary Problems Curriculum has been successful in expanding the scope and depth of concepts at the secondary level? 5 4 3 2 1

2. To what extent do the curricula of Geography, Civic Education, and Human Culture realize the following:

   a. needs of student after graduation? 5 4 3 2 1

   b. long-range educational objectives? 5 4 3 2 1

   c. integration with the topics of both the preparatory and secondary levels? 5 4 3 2 1

   d. coherence among topics and logical sequence? 5 4 3 2 1

   e. emphasis on contemporary issues and current events? 5 4 3 2 1

   f. horizontal (parallel) integration among subjects - Geography, Civic Education and Human Culture? 5 4 3 2 1

3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:

   a. activities and experiences directed towards discovering facts, concepts,and relationships? 5 4 3 2 1

   b. utilizing the environment as a source of learning? 5 4 3 2 1

   c. library reference work and field research? 5 4 3 2 1

   d. training in collection of information through scientific methods? 5 4 3 2 1

   e. using media as educational material? 5 4 3 2 1

4. To what extent does coherence exist between the three curricula (Geography, Civic Education, and Human Culture) and each of the following:

   a. History? 5 4 3 2 1

   b. Contemporary Problems? 5 4 3 2 1

   c. Islamic Education? 5 4 3 2 1

5. To what extent are the weekly hours allocated for each of the following courses sufficient:

   a. Geography? 5 4 3 2 1

   b. Civic Education? 5 4 3 2 1

   c. Human Culture? 5 4 3 2 1

6. To what extent do the three curricula (Geography, Civic Education, and Humam Culture) fosters the following educational attitudes:

   a. direct reference to the original texts? 5 4 3 2 1

b. encouragement of independent critical thinking? 5 4 3 2 1

c. satisfaction of applying knowledge to daily life situations? 5 4 3 2 1

d. application of scientific and historic method in research and thinking? 5 4 3 2 1

7. To what extent were the three curricula successful in considering individual and group differences-during activities-between students as individuals and as groups cooperating to achieve objectives? 5 4 3 2 1

8. To what extent did the three curricula consider the needs, objectives, and different problems of the society ? To what extent were solutions to these problems presented? 5 4 3 2 1

9. To what extent did learner's activities help to develop the following attitudes:

a. sound thinking? 5 4 3 2 1

b. interpretation? 5 4 3 2 1

c. rationalization? 5 4 3 2 1

d. analysis? 5 4 3 2 1

e. synthesizing? 5 4 3 2 1

f. forming opinions? 5 4 3 2 1

10. To what extent was the Geography Curriculum at the Secondary Level committed to the principle of non-repetition? 5 4 3 2 1

11. To what extent does the Geography Curriculum at the Secondary Level contribute to the utilization of logical thinking, in addition to organized content of information? 5 4 3 2 1

12. To what extent did the Geography Curriculum depend on experimental and field studies? 5 4 3 2 1

13. To what extent did the curriculum avoid topics beyond the intellect and perception of students? 5 4 3 2 1

14. To what extent was the curriculum successful in preparing the student to continue his studies at a higher level? 5 4 3 2 1

15. To what extent was integration among Geography and Contemporary Problems Curricula in Grades I, II, and III in the Arts Section realized? 5 4 3 2 1

16. To what extent were teachers successful in using different instructional materials to achieve the objectives of the Geography Curriculum at the Secondary Level? 5 4 3 2 1

17. To what extent did the curriculum help students develop attitudes and basic skills for critical thinking in the following:

    a. postponing judgement? 5 4 3 2 1

    b. utilizing several information sources? 5 4 3 2 1

    c. perceiving concepts, research methods, and scientific thinking? 5 4 3 2 1

18. To what extent did the content of the Geography Curriculum contribute to students' acquisition of the following cognitive and psychomotor skills:

    a. ability to read and understand geographical maps? 5 4 3 2 1

    b. ability to draw maps and mark appropriate geographic symbols? 5 4 3 2 1

    c. understanding statistical data? 5 4 3 2 1

    d. understanding graphs? 5 4 3 2 1

    e. use of statistical data? 5 4 3 2 1

    f. graphic representation? 5 4 3 2 1

    g. satisfactorily locating positions on maps? 5 4 3 2 1

    h. satisfactorily interpreting locations? 5 4 3 2 1

    i. applying all functions and attitudes related to previous items? 5 4 3 2 1

19. To what extent was the Geography Curriculum successful in the following:

    a. enlarging the conceptual scope from one class to the next through application of a concept to a wider area of examples? 5 4 3 2 1

    b. intensifying the students' comprehension of concepts gradually to meet the grade level requirements? 5 4 3 2 1

20. To what extent was the Grade I Curriculum successful in the students' acquisition of concepts that will help them understand the content of the currriculum of Grades 2 and 3 in the Arts Section? 5 4 3 2 1

21. To what extent was the content of Grade I Curriculum successful in its treatment of elements of hydraulic system unknown by students at the preparatory level? 5 4 3 2 1

22. To what extent does the First Grade Secondary Level curriculum adequately cover the major elements of earth system? 5 4 3 2 1

23. To what extent was the curriculum successful in illustrating the concept of living systems and in conceptualizing such a system? 5 4 3 2 1

24. To what extent was the curriculum successful in providing sufficient activities and exercises? 5 4 3 2 1

25. To what degree do you perceive the plan is adaptable to the curriculum content of Grade I? 5 4 3 2 1

<u>Geography : Grade II (Arts Section)</u>

26. New units of sub-geography, subject-matter such as applied geography, construction, national industrialization citizenship and urbanization were included in the curriculum. To what degree do you perceive that these additions had the following characteristics:

    a. interesting and motivating for student's ability to understand them ? 5 4 3 2 1

    b. new in content in comparison to previous Geography topics studied by the student? 5 4 3 2 1

27. To what extent was the curriculum successful in:

    a. explaining the meaning of "Applied Geography" and its application ? 5 4 3 2 1

    b. helping the students to understand the difference among different human habitats illustrating latitude and position, with concerned applications to the Sultanate? 5 4 3 2 1

    c. familarizing students with the concept of national settlement and its rationale? 5 4 3 2 1

28. To what extent was the curriculum successful in illustrating types of transportation, and their roles in development and enhancement of trade exchange internally and externally? 5 4 3 2 1

29. To what extent was the curriculum successful in illustrating concepts relating to oil and in educating students to all issues relative to economic, social, and political effects? 5 4 3 2 1

30. A number of individual and group projects were included in the Grade 2 Curriculum. To what degree were the following characteristics realized:

    a. even distribution? 5 4 3 2 1

    b. contribution to curriculum content enrichment and development? 5 4 3 2 1

31. A great number of activites and exercises were included in the curriculum; to what extent did these:

    a. contribute to clarifying and enriching the content? 5 4 3 2 1

    b. motivating students to analyze, synthesize, and comprehend through these activities? 5 4 3 2 1

32. To what extent did the plan coincide with the curriculum content for Grade 2 in the arts section? 5 4 3 2 1

Geography : Grade 3 (Arts Section)

33. The curriculum started with a Unit in Geographic Thought called: "Region Construction". To what extent did it contribute toward:

    a. illustrating regional construction mentioned in other geography curriculum units? 5 4 3 2 1

    b. simplifying regional thought in order to be understood intellectually? 5 4 3 2 1

    c. explaining the geographer's, reasons for employing regional systems? 5 4 3 2 1

34. The content of the curriculum dealt with regions situated between the Equator and Middle Zones. To what degree do you see that such limiting is useful to a student's particular understanding of his local environment? 5 4 3 2 1

35. To what extent was the curriculum successful in:

    a. identifying and interpreting the position of the Sultanate? 5 4 3 2 1

    b. describing, analyzing, and rationalizing the natural topography of the Sultanate? 5 4 3 2 1

    c. division of the Sultanate into its geographical regions? 5 4 3 2 1

    d. familiarizing students with agricultural products and facilities in the Sultanate? 5 4 3 2 1

    e. knowing the establishment and development of industry in the Sultanate? 5 4 3 2 1

    f. explaining the State's specific philosophy of service to citizens throughout the Sultanate? 5 4 3 2 1

36. To what extent did the content contributed to illustrating the following:

    a. general features of the Arabian Gulf region? 5 4 3 2 1

b. interpretation of the weather conditions in the Arabian Gulf region? 5 4 3 2 1

c. explanation of water resources and forming positive attitudes to dealing with them in the Arabian Gulf region? 5 4 3 2 1

d. specification of population characteristics of the Arabian Gulf and past and present transformations of Gulf States? 5 4 3 2 1

e. economic concepts that encompassed the Arabian Gulf region? 5 4 3 2 1

37. To what extent were activities and exercises adequate? 5 4 3 2 1

Contemporary Problems for Grades 2 and 3 (Science Section)

38. A number of universal contemporary problems were included in the curriculum structure with the understanding that the solution of these problems should be derived from the reality of the Sultanate, the Gulf Region and the Arab World, to what degree do you see that the follow-up of current events were:

a. interesting and exciting from the students point of view to follow-up? 5 4 3 2 1

b. useful in students' acquisition of the ability to distinguish the valuable from the non-valuable flood of information in the mass media? 5 4 3 2 1

c. helpful for students to perceive time and place relationships? 5 4 3 2 1

d. enlightning students to the extent of interaction between the Omani environment and other environments? 5 4 3 2 1

39. A number of contemporary problems were included in the curricula for Grade 2 and 3 Science Section. To what extent does the curriculum content :

a. illustrate these problems? 5 4 3 2 1

b. show the negative aspects of these problems? 5 4 3 2 1

c. motivate students to adopt positive opinions and ideas toward them? 5 4 3 2 1

40. To what degree does the curriculum connect those scientifically and experimentally-based problems with other relative sciences so that there is a comprehensive scope to those problems? 5 4 3 2 1

41. To what degree do you see this plan sufficient? 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
CIVIC EDUCATION - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Civic Education Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Civic Education Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. The spiral curriculum approach has been used in designing the content of the Omani Civic Education Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels.
   To what extent do you feel that the Civic Education Curriculum has been successful in expanding the scope and depth of concepts at the secondary level? 5 4 3 2 1

2. To what extent do the curricula of Civic Education, Human Culture,and History realize the following:

   a. needs of student after graduation? 5 4 3 2 1

   b. long-range educational objectives? 5 4 3 2 1

   c. integration with the topics of both the preparatory and secondary levels? 5 4 3 2 1

   d. coherence among topics and logical sequence? 5 4 3 2 1

   e. emphasis on contemporary issues and current events? 5 4 3 2 1

   f. horizontal (parallel) integration among subjects - Civic Education, Human Culture, and History? 5 4 3 2 1

3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:

   a. activities and experiences directed towards discovering facts, concepts,and relationships? 5 4 3 2 1

   b. utilizing the environment as a source of learning? 5 4 3 2 1

   c. library reference work and field research? 5 4 3 2 1

   d. training in collection of information through scientific methods? 5 4 3 2 1

   e. using media as educational material? 5 4 3 2 1

4. To what extent does coherence exist between the three curricula (Civic Education, Human Culture,and History) and each of the following:

   a. Geography? 5 4 3 2 1

   b. Contemporary Problems? 5 4 3 2 1

   c. Islamic Education? 5 4 3 2 1

5. To what extent are the weekly hours allocated for each of the following courses sufficient:

   a. Civil Education? 5 4 3 2 1

   b. Human Culture? 5 4 3 2 1

   c. History? 5 4 3 2 1

6. To what extent do the three curricula (Civic Education, Human Culture, and History) fosters the following educational attitudes:

   a. direct reference to the original texts? 5 4 3 2 1

b. encouragement of independent critical thinking? 5 4 3 2 1

c. satisfaction of applying knowledge to daily life situations? 5 4 3 2 1

d. application of scientific and historic method in research and thinking? 5 4 3 2 1

7. To what extent were the three curricula successful in considering individual and group differences-during activities-between students as individuals and as groups cooperating to achieve objectives? 5 4 3 2 1

8. To what extent did the three curricula consider the needs, objectives, and different problems of the society ? To what extent were solutions to these problems presented? 5 4 3 2 1

9. To what extent did learner's activities help to develop the following attitudes:

a. sound thinking? 5 4 3 2 1

b. interpretation? 5 4 3 2 1

c. rationalization? 5 4 3 2 1

d. analysis? 5 4 3 2 1

e. synthesizing? 5 4 3 2 1

f. forming opinions? 5 4 3 2 1

A - Grade 1 (Omani Society)

10. To what extent was the Omani Curriculum successful in the following:

a. presentation of general social concepts and methods of studying society as an introduction to the study of the Omani society? 5 4 3 2 1

b. relating these concepts to social circumstances in the Sultanate of Oman? 5 4 3 2 1

c. emphasizing the functions of the family, family development and treatment of family problems? 5 4 3 2 1

d. knowledge of habits, traditions and Omani values and their particular characteristics? 5 4 3 2 1

e. identifying Omani heritage such as castles, fortresses, towers, and the distinctive features of this heritage? 5 4 3 2 1

f. knowledge of the ancient and modern activities of Omani people? 5 4 3 2 1

11. To what extent was the curriculum successful in developing in students the following attitudes:

a. acquisition of positive and practical viewpoints on social development? 5 4 3 2 1

b. identifying social organizations in Oman, the function of each, and the mutual relationships among them? 5 4 3 2 1

c. providing the student with Omani culture? 5 4 3 2 1

d. taking pride in the nation, identifying with it, and being loyal to it? 5 4 3 2 1

e. instilling characteristics of good citizenship? 5 4 3 2 1

f. recognizing the great achievements of the present era? 5 4 3 2 1

g. acquisition of the skill of reading numbers, drawing charts, and figures? 5 4 3 2 1

12. To what extent did curriculum contribute to presenting an overall view of the following:

a. development in the Sultanate of Oman? 5 4 3 2 1

b. role of oil sector? 5 4 3 2 1

c. role of economic organizations and banks in <u>utilizing</u> Omani economic life? 5 4 3 2 1

<u>Grade 2 (Arab Society)</u>

13. To what extent was the Arab Society curriculum successful in realizing the following:

a. illustrating the importance of the country's location and its affect on Arab Society? 5 4 3 2 1

b. identifying problems and challenges caused by location? 5 4 3 2 1

c. defining Arabic culture and identifying its characteristics and constancy? 5 4 3 2 1

d. formation of attitudes and values that can help student's acquisition of sound habits and various skills? 5 4 3 2 1

e. perceiving factors of Arab Unity and consistence? 5 4 3 2 1

f. benefit from Quranic Surahs and the Prophet Hadith which emphasize the interrelationship between the Arabic and Islamic Worlds? 5 4 3 2 1

g. instilling pride and loyalty to Arab country and Arabic culture in students? 5 4 3 2 1

h. identifying demographic characteristics of people in the Arab countries? 5 4 3 2 1

14. To what extent did the curriculum contribute to the realization of the following :

a. recognization of the efforts of Arab and international organizations in the realm of investigating the population status in the Arab World? 5 4 3 2 1

b. dependence on extra-curricular activities and cooperative and environmental projects as a method for research and thinking? 5 4 3 2 1

c. illustrating the special features and activities of the economic structure of the Arab World? 5 4 3 2 1

d. identifying present and future directions of the national economy? 5 4 3 2 1

e. identifying present and future directions of family and social structure? 5 4 3 2 1

f. realizing educational and health services in the Arab World? 5 4 3 2 1

g. knowledge of the efforts of the Arab League in the scope of education? 5 4 3 2 1

h. knowledge of the efforts of the United Nations in the scope of education? 5 4 3 2 1

i. developing in students the skills of data and graph analysis and deduction of inferences? 5 4 3 2 1

15. To what extent do activities mentioned at the end of each chapter contribute to complementing the process of learning this curriculum concerning the study of society? 5 4 3 2 1

16. To what extent were diagrams and drawings mentioned in the textbook successful in supplementing and clarifying the ambiguous parts? 5 4 3 2 1

C. Grade 3 - (Art Section)

Contemporary Islamic World

17. To what extent does the curriculum Contemporary Islamic World contribute to the realization of the following:

a. defining the concepts of culture and civilization and the relationship between Islam and civilization? 5 4 3 2 1

b. deducting particular features of Islamic Culture from consideration of mentioned information and definitions? 5 4 3 2 1

c. dependence on Quranic Texts and Prophet's Hadith when presenting the material and when emphasizing its information and concepts? 5 4 3 2 1

d. defining concepts related to basic elements of Islamic civilization? 5 4 3 2 1

e. developing positive attitudes towards Islamic systems? 5 4 3 2 1

f. illustrating common cultural features of the people that form the Islamic Nation? 5 4 3 2 1

g. presenting some famous cultural figures in Oman and the Islamic World?	5	4	3	2	1
h. presenting some non-Arab Islamic states?	5	4	3	2	1
i. defining the conditions of Islamic minorities in various countries of the world?	5	4	3	2	1
j. developing loyalty and identifying with the Islamic Nation?	5	4	3	2	1

18. To what extent does the curriculum contribute to the realization of the following:

a. presenting the Organization of the Islamic Conference, its objectives and the most important achievements of its efforts?	5	4	3	2	1
b. illustrating the importance of Jerusalem in the Islamic World?	5	4	3	2	1
c. illustrating the importance of the Islamic World in relation to its location, place, and cultural status?	5	4	3	2	1
d. Future of Muslim and Islam in the Islamic World?	5	4	3	2	1
e. illustrating the Islamic ideology of the Universe, Man, and Life and its reflection of the Islamic philosophy of education?	5	4	3	2	1

19. To what extent do the activities included in the Civic Education Curriculum contribute to continuity and to integration as part of the total learning process?	5	4	3	2	1

PART II

SECTION A 2: CURRICULUM CONTENT
BIOLOGY - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Biology Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Biology Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement:

1.	To what extent were long-term objectives for education in Oman in general and at secondary level in particular considered when selecting and organizing curriculum content of the Biology Curriculum?	5	4	3	2	1
2.	To what degree do you consider time allocated in the school schedule for biology adequate to achieve the objectives of this curriculum including knowledge structure and skill development in the following classes :					
	a. Grade 1 (2 weekly hours)?	5	4	3	2	1
	b. Grade 2 (3 weekly hours)?	5	4	3	2	1
	c. Grade 3 (3 weekly hours)?	5	4	3	2	1
3.	To what extent did the curriculum emphasize the viewpoints of and illustrate coherence between Islam and scientific theories on creation and evolution issues in such a manner that confusion and doubt were eliminated from the mind of the learner?	5	4	3	2	1
4.	To what extent are integration and continuity illustrated in expanding and deepening biological and environmental concepts in the Biology Curriculum for Grade 1 through Grade 3 Secondary?	5	4	3	2	1

5. To what extent are balance in quantity and method of treatment and strength illustrated in each of the biology topics at the secondary level?	5	4	3	2	1
6. To what extent do you see topic sequence in the Biology Curriculum for Grade 1 Secondary is the correct sequence considering the following aspects :					
a. logical sequence of topics and graduation of difficulty and depth?	5	4	3	2	1
b. students' interest satisfaction and their physical and intellectual maturity in response to their normal questions at the appropriate time?	5	4	3	2	1
7. To what extent does the Biology Curriculum for secondary grades encourage students to enroll in some scientific activities and biology-oriented societies such as : environmental conservation groups,preservation and animals groups, and other groups?	5	4	3	2	1
8. To what extent does the Biology Curriculum for secondary grades encourage inquisitiveness, experimental and field studies, and study of Omani botany and zoology as extra-curricular activity and a self-learning method?	5	4	3	2	1
9. To what extent does the Biology Curriculum help students understand that biology is a system structure of knowledge as well as a method of research, thinking, and studying?	5	4	3	2	1
10. To what extent does the Biology Curriculum help students develop such attitudes and basic thinking habits as the following :					
a. postponing judgement?	5	4	3	2	1
b. testing the accuracy of data?	5	4	3	2	1
c. evaluating data sources?	5	4	3	2	1
d. utilizing varied information sources?	5	4	3	2	1

11. To what extent does the Biology Curriculum help students develop such attitudes and basic logical thinking habits as the following:

    a. deduction: employment and application of general principles to group of examples and specific cases? 5 4 3 2 1

    b. induction: inference of a general principle or law from the analysis and study of group of examples and particular cases? 5 4 3 2 1

12. To what extent does the Biology Curriculum help students develop the ability to form basic scientific concepts through:

    a. study and analysis of observation and results collected from a variety of living things? 5 4 3 2 1

    b. assimilating common factors among groups of these species in order to arrive at generalized concepts about: birds, reptiles, vertebrated animals..etc. 5 4 3 2 1

13. To what extent does the Biology Curriculum help students utilize the solving method for specific problems related to environmental studies and human health through the following:

    a. awakening consciousness and problem sensing? 5 4 3 2 1

    b. studying scope and phenomenon of the problem and gathering information about it? 5 4 3 2 1

    c. information analysis in order to arrive at the real causes of the problem? 5 4 3 2 1

    d. hypothesizing a group of solutions? 5 4 3 2 1

    e. testing each hypothesis and application possibility? 5 4 3 2 1

    f. arriving at most appropriate solution and presenting a strategy for implementation? 5 4 3 2 1

g. group discussion and follow-up on problem solving? 5 4 3 2 1

14. To what extent does the Biology Curriculum for secondary grades help students gain psychomotor and cognitive skills necessary to study science and biology in particular through :

a. familiarization with apparatus and equipment and methods of operation and maintenance? 5 4 3 2 1

b. generalized experiments to study a phenomenon or a specific problem? 5 4 3 2 1

c. conducting experiments? 5 4 3 2 1

d. collecting data and classifying it in such a way as to simplify study and analysis? 5 4 3 2 1

e. representing the data graphically? 5 4 3 2 1

f. presenting the data in the form of accurate scientific reports illustrated by drawings and figures? 5 4 3 2 1

15. To what degree do you feel that experimental and field studies represented in the Omani Biology Curriculum are :

a. an integrative and important part of the Biology Curriculum? 5 4 3 2 1

b. a basic part of the teaching method in biology? 5 4 3 2 1

c. a basic part for evaluating students in this subject-matter? 5 4 3 2 1

16. To what extent does studying the Omani Biology Curriculum lead to illustrating the mystery of creation and the universe and to developing man's appreciation of the Creator's Absolute Greatness in this universe's creation, organization, and protection of natural balance of the planet earth? 5 4 3 2 1

17. To what extent does Omani Biology Curriculum contribute to familiarizing the student with natural resources, environmental dangers, sound exploitation of resources, and environment conservation?	5	4	3	2	1
18. To what extent is integration accomplished between the Biology Curriculum and the other Science Curricula at the secondary level:					
a. Biology and Chemistry?	5	4	3	2	1
b. Biology and Physics?	5	4	3	2	1
c. Biology and Mathematics?	5	4	3	2	1
d. Biology and Social Studies?	5	4	3	2	1
19. A list of objectives to be achieved is included in the Biology Curriculum. To what degree do you feel that during your implementation of the curriculum, the curriculum realized the following objectives:					
a. developing the student's interest in his natural environment?	5	4	3	2	1
b. developing the student's consciousness of general health principles and how to conserve his body?	5	4	3	2	1
c. not accepting myths concerning health and disease issues, but determining cause and effect cases?	5	4	3	2	1
d. adopting experimental method as a means of confirming the student's environmental knowledge?	5	4	3	2	1
e. adopting scientific thinking methodology in solving his problems as an individual and also in studying and suggesting solutions to social problems?	5	4	3	2	1
f. independence in thinking and not being guided by other people's opinions except after revision and conviction of their truth?	5	4	3	2	1

g. cooperation in work and research to study environmental problems and related social problems? 5 4 3 2 1

20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena:
(Indicate, please, which classes you will be teaching.)

First: Grade 1 Secondary

Unit 1:

a. Health and disease 5 4 3 2 1

Unit 2:

a. Earth layers - earth crust - earth sphere 5 4 3 2 1

b. Rocks and soil 5 4 3 2 1

c. Factors leading to earth's surface topography 5 4 3 2 1

d. Aerosphere 5 4 3 2 1

e. Man's biological environment 5 4 3 2 1

f. Geologic eras 5 4 3 2 1

Unit 3:

a. The living organism 5 4 3 2 1

b. Organic and inorganic compounds 5 4 3 2 1

c. Living matter 5 4 3 2 1

d. Protoplasm 5 4 3 2 1

e. Protozoa 5 4 3 2 1

f. Autotrophs & heterotrophs 5 4 3 2 1

g. Incidental creation 5 4 3 2 1

h. Theory and fact and the difference between them cohering change 5 4 3 2 1

i. Concept of creation in the Qura'n 5 4 3 2 1

Unit 4

a. Variations in living organisms (form and function)	5	4	3	2	1
b. Adaptation	5	4	3	2	1
c. Natural selection	5	4	3	2	1
d. Mutation	5	4	3	2	1
e. Evolution of living organisms	5	4	3	2	1
f. Classification	5	4	3	2	1
g. Species	5	4	3	2	1
h. Scientific name for the living organism	5	4	3	2	1
i. Four kingdoms of living organisms	5	4	3	2	1
j. Classification basis and method of choice	5	4	3	2	1

Unit 5:

a. Micro-organisms	5	4	3	2	1
b. Viruses	5	4	3	2	1
c. Bacteria	5	4	3	2	1
d. Algae	5	4	3	2	1
e. Fungi	5	4	3	2	1
f. Bread molds	5	4	3	2	1
g. Metaphyta & monera	5	4	3	2	1
h. Vertebrates and invertebrates	5	4	3	2	1
i. Classification of vertebrates and invertebrates	5	4	3	2	1

Unit 6:

a. What is an Ecosystem?	5	4	3	2	1
b. Several Ecosystems and their classification	5	4	3	2	1

Second: Grade 2 Secondary

Unit 1:

a. Living cell	5	4	3	2	1
b. Structure of the living cell and particular functions	5	4	3	2	1
c. Cell material	5	4	3	2	1
d. Carbohydrates	5	4	3	2	1
e. Proteins	5	4	3	2	1
f. Facts	5	4	3	2	1
g. Nucleic acids	5	4	3	2	1
h. Protoplasm	5	4	3	2	1
i. Types of solutions	5	4	3	2	1
j. Ionic and non-ionic substances	5	4	3	2	1
k. Concept of difusion and permeability in living cells	5	4	3	2	1
l. Osmosis and osmotic pressure	5	4	3	2	1
m. Plasmolysis and turgor and their relation to osmosis	5	4	3	2	1
n. Photosynthesis	5	4	3	2	1
o. Aerobic and anaerobic respiration	5	4	3	2	1
p. Metabolism in living organisms	5	4	3	2	1
q. Cellular fission and mitoses	5	4	3	2	1

Unit 2:

a. Functional specialization in the cells of living organisms	5	4	3	2	1
b. Variation of structure of cells according to function	5	4	3	2	1

c. Kinds of plant tissues	5	4	3	2	1
d. Kinds of animal tissues	5	4	3	2	1
Unit 3:					
a. Concept of system in the specialized living organism	5	4	3	2	1
b. Photosynthesis systems - pors system	5	4	3	2	1
c. Elements necessary for photosynthesis	5	4	3	2	1
d. Transpiration through stomata	5	4	3	2	1
e. Concept of photo-parameters	5	4	3	2	1
f. Electronic activation	5	4	3	2	1
g. Atmospheric carbon fixation	5	4	3	2	1
h. Concept of digestion and the digesive system	5	4	3	2	1
i. Catabolism and anabolism	5	4	3	2	1
j. Concept of (transport) in the body of the living organism	5	4	3	2	1
k. Transport in plants	5	4	3	2	1
l. Transport in animals	5	4	3	2	1
m. Circulatory system - open and closed circulatory systems	5	4	3	2	1
n. Circulatory system in man	5	4	3	2	1
o. The blood - blood coagulation	5	4	3	2	1
p. Lymph - lymphatic system	5	4	3	2	1
q. Excretion - excretory system	5	4	3	2	1
r. Excretory system in plants	5	4	3	2	1
s. Variety of excretory methods and systems in animals	5	4	3	2	1

t. Support in plant and animals	5	4	3	2	1
u. Skeleton (skeletal system) in animals	5	4	3	2	1
v. Exoskeletal system	5	4	3	2	1
w. Endoskeletal system	5	4	3	2	1
x. Skeleton in man	5	4	3	2	1

Third: Grade 3 Secondary

Unit 1:

a. Movement in living organisms	5	4	3	2	1
b. Muscular system	5	4	3	2	1
c. Variation of types and methods of motion in living organisms	5	4	3	2	1
d. Specialization in muscular tissues	5	4	3	2	1
e. Concept of coherent functions in specialized living organisms	5	4	3	2	1
f. Concept of sensation	5	4	3	2	1
g. Concept of nervous system	5	4	3	2	1
h. Neuro-muscular coherence	5	4	3	2	1
i. Mechanical varieties of neuro-muscular coherence in living organisms	5	4	3	2	1
j. Types of nervous cells	5	4	3	2	1
k. Nerve impulse	5	4	3	2	1
l. Polarization	5	4	3	2	1
m. Central nervious system	5	4	3	2	1
n. Peripheral nervous system	5	4	3	2	1
o. Variation nerve impulse according to different sense organs.	5	4	3	2	1
p. Hormones	5	4	3	2	1
q. Auxins responsible for growth in plants	5	4	3	2	1

r. Phototropism & geotropism	5	4	3	2	1
s. Flower hormones	5	4	3	2	1
t. Hormonic organization in animals	5	4	3	2	1
u. Hormone excreting glands, their types, and the type of hormones they excrete.	5	4	3	2	1
v. Neuro - hormonic coherence	5	4	3	2	1
w. Sexual and asexual reproduction	5	4	3	2	1
x. Varied forms of sexual and asexual repeoduction in living organisms	5	4	3	2	1
y. Male and female gametogenesis and method of their formation	5	4	3	2	1
z. Meiosis	5	4	3	2	1
aa. Fertilization	5	4	3	2	1
bb. Various forms of sexual reproduction in living organisms	5	4	3	2	1
cc. Reproduction in man and the human reproductive systems	5	4	3	2	1

Unit 2:

a. Concept of homeostasis	5	4	3	2	1
b. Concept of digestion and its relation to homeostasis	5	4	3	2	1
c. Concept of respiration and its relation to homeostasis	5	4	3	2	1
d. Concept of excretion and its relation to homeostasis	5	4	3	2	1
e. Body temperature regulation and the role of skin and circulatory system.	5	4	3	2	1
f. Role of hormones in homeostasis	5	4	3	2	1
g. Role of nervous system in homeostasis	5	4	3	2	1

Unit 3:

a. Concept of genetics	5	4	3	2	1
b. Concept of heredity	5	4	3	2	1
c. Mendel's law	5	4	3	2	1
d. Chromosomes carrying hereditary characteristics	5	4	3	2	1
e. Hereditary basis are chemical	5	4	3	2	1
f. D.N.A	5	4	3	2	1
g. Heredity code	5	4	3	2	1
h. Genes and the carrying of heredity characterisitcs	5	4	3	2	1
i. Genetic mutation	5	4	3	2	1
j. Complete and incomplete dominance	5	4	3	2	1
k. Genetic reactions	5	4	3	2	1
l. Case of incomplete dominance	5	4	3	2	1
m. Fatal factors	5	4	3	2	1
n. Multiplicative factors	5	4	3	2	1
o. Sexual chromosones and birth control	5	4	3	2	1
p. Varied forms and variation of specie affected characteristics in animals.	5	4	3	2	1
q. Some genetic diseases	5	4	3	2	1
r. Varieties of genetic diseases	5	4	3	2	1
s. Inherited predisposition certain diseases	5	4	3	2	1
t. Improve reproduction through genetic engineering.	5	4	3	2	1

Unit 4

a. Concept of ecology	5	4	3	2	1
b. Factors affecting environment	5	4	3	2	1

c. Atmospheric factors (light - intensity of light - light duration - heat and humidity - gases and winds)	5	4	3	2	1
d. Location factors (altitude and latitude)	5	4	3	2	1
e. Soil factors	5	4	3	2	1
f. Water factor	5	4	3	2	1
g. Chemical factors	5	4	3	2	1
h. Biological factors and natural and dynamic balance in ecological activities.	5	4	3	2	1
i. Matter and energy cycle	5	4	3	2	1
j. Gas-cycle (oxygen-carbon dioxide - nitrogen) in nature	5	4	3	2	1
k. Water cycle in nature	5	4	3	2	1
l. Food chain and food network	5	4	3	2	1
m. Products and consumptions	5	4	3	2	1
n. Food pyramid	5	4	3	2	1
o. Environmental pollution	5	4	3	2	1
21. To what degree do you feel that there is a clear intellectual error attached to Biology topics in each of the following classes:					
a. as for topics of Grade 1?	5	4	3	2	1
b. as for topics of Grade 2?	5	4	3	2	1
c. as for topics of Grade 3?	5	4	3	2	1
22. To what degree do you feel that concentrating on environment topics in Grade 1 and Grade 3 and not teaching them at Grade 2 is a good and desired division?	5	4	3	2	1
23. To what degree do you feel that it is better to study all environment topics as an integrated topic in one class?	5	4	3	2	1

24. To what degree do you feel that dividing the topic systems and biological functions between Grades 2 and 3 is a desired method? 5 4 3 2 1

25. To what degree have the suggested curriculum and teaching methods in teachers' manual given sufficient importance to student experimental study in biology? 5 4 3 2 1

26. To what extent are apparatus such as microscopes and dissection equipment available to allow every student to experiment by himself? 5 4 3 2 1

27. To what extent are living organism species under study sufficiently available for demonstration and laboratory experimentation lessons so as to allow students to study by themselves? 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
CHEMISTRY - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Chemistry Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Chemistry Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. To what extent does Omani Curriculum achieve integration between Chemistry and other subject-matters:

   a. Chemistry and Physics? 5 4 3 2 1

   b. Chemistry and Biology? 5 4 3 2 1

   c. Chemistry and Mathematics? 5 4 3 2 1

2. Modern Chemistry Curricula adopt "laboratory experiments" as a method of achieving the objectives of the subject. To what extent does the Omani Curriculum provide adequate opportunities for the achievement of the following:

   a. students' participation in demonstration experiments? 5 4 3 2 1

   b. students' participation in experimental activities which include:

      1. planning for the experiment? 5 4 3 2 1

2. preparation of equipment, materials, and preparation and installation of apparatus? 5 4 3 2 1

3. accurate observation of progress of experiments? 5 4 3 2 1

4. development of the habit of qualitiative and quantitative recording of observations? 5 4 3 2 1

5. ability to construct and interpret curves? 5 4 3 2 1

6. result analysis and conclusions? 5 4 3 2 1

7. comprehensive report writing? 5 4 3 2 1

c. The curriculum inclusion of sufficient number of experiments to realize laboratory objectives? 5 4 3 2 1

d. emphasis of curriculum on the use of a special lab workbook? 5 4 3 2 1

e. curriculum emphasis on provision of necessary educational materials such as: apparatus, chemicals, etc.? 5 4 3 2 1

f. allocation of specific weekly hours for experimental laboratory work? 5 4 3 2 1

g. provision of sufficient weight for experimental activities when evaluating the students? 5 4 3 2 1

3. A list of objectives are included in the Secondary Chemistry Curriculum. To what degree do you feel that the curriculum content succeeded in achieving the following objectives:

a. development of basic scientific concepts that help students understand and adapt to chemical phenomena in their environment? 5 4 3 2 1

b. students' acquisition of information and skills that will qualify them to continue their higher education studies in different scientific fields? 5 4 3 2 1

c. understanding the role of Chemistry in exploiting natural resources and available energy resources to increase national income and to raise the standard of living? 5 4 3 2 1

d. identifying causes and dangers of environmental - pollution by chemical and radioactive materials and identifying preventive means? 5 4 3 2 1

e. acquisition of the following skills:

1. manipulation and maintenance of apparatus and laboratory equipment? 5 4 3 2 1

2. utilization of mathematical procedures to deduce laws and relations and apply them? 5 4 3 2 1

3. utilization of multi-sources of information, such as: references - trips - seminars. etc.? 5 4 3 2 1

4. interpretation of partial events and inter relating them to arrive to general principles and laws? 5 4 3 2 1

5. application of laws and general principles to solve problems and interpret chemical phenomena? 5 4 3 2 1

f. students' acquisition of the scientific thinking through continuous application of theoretical and practical chemistry topics during their study? 5 4 3 2 1

g. reinforcement of scientific attitude characterized by the following aspects:

1. inference of events to their actual causes? 5 4 3 2 1

2. adoption of experimental method to test hypothesis? 5 4 3 2 1

3. no steadfastness to an opinion, but modifying it in light of new facts? 5 4 3 2 1

h. ensuring the belief in the Almighty Creator through studying His Laws in creation that show His Ability, Creativeness, Control, Neatness, Coherence and Beauty? 5 4 3 2 1

4. Some concepts are repeated in Physics and Chemistry. To what extent do you agree with the necessity of repetitive study of these concepts:

a. laws of gases and kinetic theory of gases? 5 4 3 2 1

b. development of atomic model? 5 4 3 2 1

c. radioactivity? 5 4 3 2 1

d. electrical nature of matter, and Faraday's laws of electro-chemical analysis? 5 4 3 2 1

5. Chemistry Curriculum uses measuring units from different systems of units. To what degree do you see the following uses are necessary:

a. employment of a variety of systems of units? 5 4 3 2 1

b. limit to the employment of (SI) units? 5 4 3 2 1

6. You have applied Chemistry Curriculum at the Secondary Level. To what extent do you agree on the soundness of the following statements:

a. secondary curriculum content is a natural consequence of Preparatory Science Curriculum? 5 4 3 2 1

b. curriculum content is appropriate to the intellectual level of average students? 5 4 3 2 1

c. time allocated for curriculum completion is appropriate for theoretical and experimental topics? 5 4 3 2 1

d. curriculum topics are categorized at logical consequence? 5 4 3 2 1

e. Curriculum achievement of basic Chemistry concepts in a hierarchical order of classes, such concepts are:

1. development of atomic model? 5 4 3 2 1

2. electrical nature of elementary particles of matter? 5 4 3 2 1

3. quantitative chemical calculations? 5 4 3 2 1

4. periodicity in elements characteristics? 5 4 3 2 1

5. chemical equation as an expression of reaction and its dynamics? 5 4 3 2 1

7. The following are some basic concepts in Secondary Level Curriculum:

<u>First : Grade 1 Secondary</u>

Unit 1 : Procedure of Scientific Research in Chemistry:

Descriptive study in the scientific method (objective-law-theory).
To what degree do you feel that the topic is:

1. appropriate for Grade 1 Secondary? 5 4 3 2 1

2. must be moved to a higher grade? 5 4 3 2 1

3. must be deleted from Secondary Level? 5 4 3 2 1

Units 2, 3, and 4: Structure of Matter as Atoms and Molecules:

The Scientific Model - Gas Laws - Elements and Compounds - Mole - Formulae - Laws of Chemical Combination - Gas Laws - Kinetic Theory - Auagadro's Hyopthesis:

a. To what degree do you feel that the content of these units:

1. realizes units' objectives (structure of matter as atoms and molecules)? 5 4 3 2 1

2. Logical consequence in topics is considered? 5 4 3 2 1

3. Historical consequence in Chemistry is considered? 5 4 3 2 1

4. provides sufficient opportunity for training in writing a balanced chemical equation? 5 4 3 2 1

b. To what degree do you see that the Mole concept:

1. is appropriate to the cognitive ability of the average student? 5 4 3 2 1

2. provides sufficient opportunity to employ it in chemical calculations? 5 4 3 2 1

Unit 7: Modern Periodic Table

To what degree do you feel that this topic is:

1. appropriate to the average student in this class? 5 4 3 2 1

2. crowded with sub-concepts that could be deleted from this class? 5 4 3 2 1

Second : Grade 2 (Science Section)

Unit 1 : Atomic structure and periodic Table:

a. To what degree do you feel that the following topics need more details and depth:

1. Electro-magnetic spectrum? 5 4 3 2 1

2. Photones (between Einstein and Max Blank)? 5 4 3 2 1

3. Balmer series? 5 4 3 2 1

Unit 2 : Chemical Bonds and Molecular Structure

A group of concepts are included in this unit. Some may be moved as they belong to, or are proper to subjects in Grade 3 Secondary. To what degree do you agree that the following concepts should be transferred to Grade 3 Secondary:

1. double and triple bonds in organic compounds? 5 4 3 2 1
2. application using ethylene, acetylene, and ethylene diamine? 5 4 3 2 1
3. hybridization and geometric forms of molecules? 5 4 3 2 1
4. isomerism and geometrical molecular structure? 5 4 3 2 1

Units: 3, 4, 5, and 6

a. To what degree do you feel that the following concepts are appropriate to the standard of the student at Grade 2 Secondary Scientific:

   1. heat of formation and heat of reaction? 5 4 3 2 1
   2. application of Le-Chatelier principle? 5 4 3 2 1
   3. chemical calculations by Mole method? 5 4 3 2 1

b. To what degree do you feel that the curriculum of Grade 2 Secodary Scientific provides:

   1. sufficient opportunity to carry out appropriate experiments? 5 4 3 2 1
   2. sufficient opportunity for training on writing chemical equations? 5 4 3 2 1
   3. adequate emphasis on relating curriculum concepts to economic activities and natural resources of Oman? 5 4 3 2 1

Third : Grade 3 (Science Section)

Units : 1 and 2 : Acids, Bases, Oxidation and Reduction

In light of having taught these two units, to what degree do you see that the following are sound:

1. the curriculum should give appropriate attention to the processes of volumetric analysis? 5 4 3 2 1

2. necessity of relating different indicators with the sensitivity of each to Hydrogen ion power (pH) value? 5 4 3 2 1

3. clear illustration of the concept of "oxidation number"? 5 4 3 2 1

4. most students can balance oxidation reduction reactions equations? 5 4 3 2 1

5. most students can apply oxidation reduction concepts in several aspects? 5 4 3 2 1

Units 3 : Organic Compounds

1. To what degree do you see that the content of this unit is sufficient at this stage? 5 4 3 2 1

2. Organic compound must be started at :

   a. Grade 2 Secondary? 5 4 3 2 1

   b. end of preparatory level? 5 4 3 2 1

3. To what degree do you see that chemcial characteristics, reaction processes, methods of identification of compounds, must be added, and are not satisfied by the present teaching of physical characteristics? 5 4 3 2 1

4. To what extent the identification of basic elements in organic compounds, differentiation between Alyphatic and Aromatic compounds, must be added? 5 4 3 2 1

Unit 4 : Biochemistry:

a. To what extent do you agree that it is better to add the following topics:

1. hydro-analysis of starch? 5 4 3 2 1

2. effects of saturated fats on man's health? 5 4 3 2 1

3. notation on synthetization of some hormones and vitamins and some of their benefits to man? 5 4 3 2 1

b. To what degree do you see that the following topics be deleted:

1. complicated structural formulae of starch and cellulose? 5 4 3 2 1

2. complicated structural formulae of vitamins and industrial detergents? 5 4 3 2 1

Units 5 and 6 : Study of Some Periods and Groups of the Periodic Table.

To what degree do you agree on the context of the following statements:

1. It is preferable to forward to these units by transferring the following topics from Grade 2: factors affecting the chemical activity of elements? 5 4 3 2 1

2. It is preferable to emphasize, after studying the general characteristics, the characteristics of one of the elements of the group or small number of the elements of the period? 5 4 3 2 1

3. It is preferable to give more details (illustrations) on the following topics:

a. extraction of known metals from their ores? 5 4 3 2 1

b. desalination of sea-water and treatment of hard-water? 5 4 3 2 1

4. To what degree do you see that more attention should be given to the topic of detection and identification of normal common basic and acidic ions? 5 4 3 2 1

5. To what degree do you feel that more attention should be given to differentiation between complex ions and double salts (practically)? 5 4 3 2 1

Unit 7 : Radioactivity

To what extent do you agree with the context of the following sentences:

1. It is better to employ SI units instead of the C.G.S. System of units? 5 4 3 2 1

2. It is preferable to add to the curriculum these topics: hazards of radioactive radiations, critical and permissible doses, protection from radiation? 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
PHYSICS - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Physics Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Physics Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement:

1. To what extent were the long-term objectives considered when selecting and organizing Physics Curriculum content for Secondary Level? 5 4 3 2 1

2. To what extent are the number of weekly hours allocated for teaching Physics Curriculum sufficient to achieve the objectives of the curriculum namely - theoretical knowledge and experimental skills - for the following classes :

   a. Grade 1 (2 weekly hours)? 5 4 3 2 1

   b. Grade 2 (4 weekly hours)? 5 4 3 2 1

   c. Grade 3 (4 weekly hours)? 5 4 3 2 1

3. To what extent does Physics Curriculum encourage students to participate in scientific activities such as : Science Club, contests, scientific fairs? 5 4 3 2 1

4. To what extent are integration and progression achieved in Physics Curriculum content for the three classes of the Secondary Level? 5 4 3 2 1

5.	To what extent is continuity realized between Science Curricula for Primary and Preparatory Levels and Physics Curricula for Secondary Level?	5	4	3	2	1
6.	To what extent is integration realized between Physics Curriculum at the Secondary Level and the curricula of other subject-matters, as follows:					
	a. Physics and Chemistry?	5	4	3	2	1
	b. Physics and Mathematics?	5	4	3	2	1
	c. Physics and Biology?	5	4	3	2	1
7.	To what extent does the curriculum content and methodology encourage students to understand Physics as a systematic structure of knowledge methodology, and way of thinking?	5	4	3	2	1
8.	To what extent do experimental and field studies according to Omani curriculum :					
	a. form a complementary part of Physics Curriculum?	5	4	3	2	1
	b. represent a basic part in teaching methods of Physics?	5	4	3	2	1
9.	To what extent does the Physics Curriculum help students to develop basic attitudes and habits of critical thinking such as :					
	a. suspending judgement?	5	4	3	2	1
	b. testing the extent of correct data?	5	4	3	2	1
	c. employment of variety of information-sources?	5	4	3	2	1
10.	To what extent does the Physics Curriculum help students to develop the skills of logical thinking and the use of this method of thinking in relation to :					
	a. deduction: employment and application of a general principle to specific cases and examples?	5	4	3	2	1

b. induction: deducing a general principle from the analysis, exemplification, and studying of specific cases? 5 4 3 2 1

11. Included in Physics Curriculum are a list of objectives that the curriculum tries to achieve.
To what degree do you feel as a result of implementation of the curriculum that it has succeeded in realizing the following objectives:

a. providing students with sufficient scientific and functional knowledge to enable him to adapt to scientific and technological development? 5 4 3 2 1

b. acquisition of the following skills:

1. performing experiments, manipulation of laboratory equipment and apparatus, and carrying out accurate measurements? 5 4 3 2 1

2. interpretation and drawing of curves and their application to understand relations between variables for a particular phenomenon? 5 4 3 2 1

3. expressing Physics relationships in mathematical forms and application of theories and laws in solving problems in Physics? 5 4 3 2 1

c. developing sound scientific norms and attitudes in students such as :

1. intellectual objectivity and respect for others opinions? 5 4 3 2 1

2. science reading habit, scientific inquisitiveness, and the perception that scientific knowledge is not final, but can be modified? 5 4 3 2 1

3. scientific honesty, self-trust and dependence? 5 4 3 2 1

4. cooperation and valuing group work? 5 4 3 2 1

5. development of student ability to solve problems by the following methodology: problem identification, data collection, hypothesis construction, testing of hypothesis, conclusion of appropriate relations or solution, and then application of this relations to similar cases? 5 4 3 2 1

12. Physics Curriculum in the Secondary Level grades consists of a number of independent units. To what degree do you feel that this approach in organizing subject matter material supplies the student with a sufficient degree of scientific knowledge in Physics? 5 4 3 2 1

13. To what degree do you feel that Physics Curriculum in each of the secondary grades is appropriate for the students' cognitive maturity relevant to:

    a. amount of scientific knowledge? 5 4 3 2 1

    b. level of topic treatment? 5 4 3 2 1

    c. time allocated to study Physics in each grade? 5 4 3 2 1

    d. cognitive skills necessary to comprehend and understand scientific knowledge inculcated in the curriculum? 5 4 3 2 1

14. To what extent is balance achieved among parts of the Physics Curriculum content material so that it is a systematic and coherent fiber of knowledge? 5 4 3 2 1

15. To what degree do you see curriculum coverage of Geometrical Optics (reflection and refraction laws, lenses, optical systems and computations) is sufficient? 5 4 3 2 1

16. To what degree do you see that curriculum coverage of main concepts of heat (heat transfer, expansion by heat, calorimetry) is sufficient? 5 4 3 2 1

17. To what extent do you agree with repeating some concepts in Physics and Chemistry Curricula at the Secondary level such as :

    a. laws of gases? 5 4 3 2 1

    b. kinetic theory of gases? 5 4 3 2 1

    c. development of atomic model? 5 4 3 2 1

    d. radio-activity and the structure of the nucleus? 5 4 3 2 1

18. To what degree do you feel that the curriculum content has sufficiently covered each of its units:

First : Grade 1 Secondary

a. Unit 1: Physics and Measurement

1. To what extent did the unit cover basic concepts of measurements and fundamental and derived units of physical quantities? 5 4 3 2 1

2. To what extent are concepts of vector product of two vectors and scalar product of two vectors illustrated? 5 4 3 2 1

3. To what extent is the unit concerned with developing basic skills of measurement, the correlation between errors, accuracy of measurement and significant figures? 5 4 3 2 1

4. To what extent does the curriculum assure the continuous application of already presented concepts as application of SI units? 5 4 3 2 1

b. Unit 2: Motion, Force, and Work

1. To what extent are basic concepts of motion, force, work, power, energy, and energy transformations illustrated? 5 4 3 2 1

2. To what extent was mathematical treatment of momentum and its relations to Newton's second law illustrated? 5 4 3 2 1

3. To what extent does the unit cover experimental and practical work necessary to develop student's skills of measuring time and calculating velocity and acceleration and emphasize the basic concepts and mathematical expressions of motion, work, and power? 5 4 3 2 1

c. Unit 3: Liquids

1. To what extent are the concepts of pressure distribution in hydrostatics and its application to derive the upthrust and Archimedes principle illustrated? 5 4 3 2 1

2. To what extent were the following concepts illustrated:
Motion of Liquids, Flow lines, Flow pipe uplifting force, coefficient of viscosity in dynamic liquids and mathematical expressions relating these quantities to each other? 5 4 3 2 1

3. To what extent are laboratory experiments supporting concepts of this unit sufficient? 5 4 3 2 1

Second : Grade 2 Secondary

a. Unit 1: Laws of Conservation of Mass and Energy.

1. To what extent does the unit emphasize the following concepts:
Closed system, Energy transformations, conservation of lenear and angular momentum, and energy-mass equivalence? 5 4 3 2 1

2. To what extent are illustrations made in the mathematical treatment of :
elastic and inelastic collision, coefficient of bouyance, inertia and laws of conservation? 5 4 3 2 1

3. To what extent are laboratory experiments sufficient to support student comprehension of these concepts? 5 4 3 2 1

b. Unit 2: Heat and Thermodynamics.

1. To what extent are the following basic concepts illustrated:
Kinetic Theory of Gases - gas laws and ideal gas, isothermal, adiabatic and isobaric gas processes, Second Law of Thermodynamics? 5 4 3 2 1

2. To what extent are mathematical treatments of Kinetic Theory of Gases and pressure of ideal gas fully illustrated? 5 4 3 2 1

3. To what extent are laboratory experiments sufficient to support these concepts to students? 5 4 3 2 1

c. Unit 3: Wave Nature

1. To what extent does the curriculum cover the concepts of wave - motion and its structure as a means of transfer of energy? 5 4 3 2 1

2. To what extent are basic concepts of physical optics (interference and diffraction) fully illustrated? 5 4 3 2 1

3. To what extent are laboratory experiment in the curriculum sufficient to support these concepts to students? 5 4 3 2 1

Third: Grade 3 Secondary

a. Unit 1: Fields and Forces.

1. To what extent are basic concepts such as:
electric field, electric flux, electric potential, magnetic field, Ohm's Law, Kirchov's Laws and electromagnetic induction illustrated? 5 4 3 2 1

2. To what extent is there a clear illustration for the correlation between concepts of different fields (electric, magnetic and gravity), and the forces resulting from these fields? 5 4 3 2 1

3. To what extent is there a clear illustration for the correlation between mathematical expressions for field intensity, force, and potential energy of these fields? 5 4 3 2 1

4. To what extent are laboratory and practical experiments sufficient to support these concepts to students? 5 4 3 2 1

b. Unit 2: Structure of the Atom and Modern Quantum Theory.

1. To what extent does this unit add to the concepts previously studied by the student in Chemistry Curriculum of Grade 2 Secondary? 5 4 3 2 1

2. To what extent are other basic concepts clearly illustrated such as: atomic spectra and their relation to atomic structure, Modern Quantum Theory, de Broglie waves and electron diffraction, Heizenberg uncertainty principle, and Paulie exclusion principle? 5 4 3 2 1

3. To what extent are laboratory work and practical experiments sufficient to support student comprehension of these concepts? 5 4 3 2 1

d. Unit 3: Atomic Nucleus and Radioactivity.

1. To what extent was new content added in this unit supplementing the concepts already included in Chemistry? 5 4 3 2 1

2. To what extent is there a clear illustration of the correlation between nuclear field and other fields previously studied in Unit 1? 5 4 3 2 1

3. To what extent were the following concepts illustrated: nuclear binding energy, nuclear potential, binding energy curve, and energy of nuclear fission and fusion? 5 4 3 2 1

4. To what extent are laboratory work and practical experiments insufficient to illustrate and re-inforce student comprehension of basic concepts in this unit? 5 4 3 2 1

PART II
SECTION A 2: CURRICULUM CONTENT
HUMAN CULTURE - SECONDARY LEVEL
(For Teachers only)

Introduction: Below are several statements concerning the Sultanate of Oman's Human Culture Curriculum. Some of the statements are of a general nature, and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Human Culture Curriculum in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Please circle the number (only one) which reflects your evaluation of the statement.

1. The spiral curriculum approach has been used in designing the content of the Omani Human Culture Curriculum. This means that a group of concepts are treated at the primary and secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels.
   To what extent do you feel that the Human Culture Curriculum has been successful in expanding the scope and depth of concepts at the secondary level? 5 4 3 2 1

2. To what extent do the curricula of Human Culture, Civic Education, and History realize the following:

   a. needs of student after graduation? 5 4 3 2 1

   b. long-range educational objectives? 5 4 3 2 1

   c. integration with the topics of both the preparatory and secondary levels? 5 4 3 2 1

   d. coherence among topics and logical sequence? 5 4 3 2 1

   e. emphasis on contemporary issues and current events? 5 4 3 2 1

   f. horizontal (parallel) integration among subjects - Human Culture, Civic Education, and History? 5 4 3 2 1

3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:

   a. activities and experiences directed towards discovering facts, concepts,and relationships? 5 4 3 2 1

   b. utilizing the environment as a source of learning? 5 4 3 2 1

   c. library reference work and field research? 5 4 3 2 1

   d. training in collection of information through scientific methods? 5 4 3 2 1

   e. using media as educational material? 5 4 3 2 1

4. To what extent does coherence exist between the three curricula (Human Culture, Civic Education, and History) and each of the following:

   a. Geography? 5 4 3 2 1

   b. Contemporary Problems? 5 4 3 2 1

   c. Islamic Education? 5 4 3 2 1

5. To what extent are the weekly hours allocated for each of the following courses sufficient:

   a. History? 5 4 3 2 1

   b. Civic Education? 5 4 3 2 1

   c. Human Culture? 5 4 3 2 1

6. To what extent do the three curricula (History, Human Culture, and Civic Education) fosters the following educational attitudes:

   a. direct reference to the original texts? 5 4 3 2 1

b. encouragement of independent critical thinking?	5	4	3	2	1
c. satisfaction of applying knowledge to daily life situations?	5	4	3	2	1
d. application of scientific and historic method in research and thinking?	5	4	3	2	1
7. To what extent were the three curricula successful in considering individual and group differences-during activities-between students as individuals and as groups cooperating to achieve objectives?	5	4	3	2	1
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society ? To what extent were solutions to these problems presented?	5	4	3	2	1
9. To what extent did learner's activities help to develop the following attitudes:					
a. sound thinking?	5	4	3	2	1
b. interpretation?	5	4	3	2	1
c. rationalization?	5	4	3	2	1
d. analysis?	5	4	3	2	1
e. synthesizing?	5	4	3	2	1
f. forming opinions?	5	4	3	2	1
10. To what extent is the content of the Human Culture Curriculum in accordance with the cognitive development of the secondary level student?	5	4	3	2	1
11. To what degree is there integration between the Human Culture Curriculum for Grade II arts section with Grade III arts section?	5	4	3	2	1
12. To what extent did the Human Culture Curriculum for secondary level contribute to presenting a holistic (integrative) frame of Human Culture?	5	4	3	2	1

13. To what extent was the Human Culture Curriculum at the secondary level successful in evaluating human ideas, opinions, and thoughts by the standards of Islamic belief and values? 5 4 3 2 1

14. To what extent was the Human Culture Curriculum successful in encouraging initiativeness, question presentation, and questioning in all intellectual situations? 5 4 3 2 1

15. To what extent was the Human Culture Curriculum successful in instilling in students an appreciation and respect for individual human differences? 5 4 3 2 1

16. To what extent did the Human Culture Curriculum for Class II Secondary arts section realize the following :

    a. formation of integration of different aspects of philosophy? 5 4 3 2 1

    b. formation of a holistic outlook in life as perceived by eminent Western philosophers? 5 4 3 2 1

    c. ascertain the creativeness of Islamic thought regardless of the effects of Greek philosophy? 5 4 3 2 1

    d. appreciation of the importance of philosophy in the development of human thought? 5 4 3 2 1

    e. instilling in students the first idea of the meaning of life, the human struggle with universal problems, and attempts at finding solutions to them? 5 4 3 2 1

    f. identifying the basis for values derived from the Quran and the Prophet's tradition? 5 4 3 2 1

    g. development and implementation of sound thinking, avoiding doubt and misgivings, and following the way that leads to the truth? 5 4 3 2 1

h. developing a sense of appreciation for sound thinking methodologies?	5	4	3	2	1
i. identifying some concepts and principles and specific research methodologies applied in some social sciences?	5	4	3	2	1
j. assuring the practice of the student of some particular skills such as data collection, reference work, footnoting, and sources.	5	4	3	2	1
k. instilling an appreciation of the importance of psychology in human life.	5	4	3	2	1
l. recognizing and criticizing some facts and principles that govern aspects of human behavior.	5	4	3	2	1
m. recognize and criticize new trends in the interpretation of human behavior.	5	4	3	2	1
n. recognization and criticism of modern approaches -- interpretation of human self and personality.	5	4	3	2	1
o. identifying clearly the relationship between the psychology of human personality and its environment.	5	4	3	2	1
p. instilling appreciation of Islamic educators' contributions to educational psychology.	5	4	3	2	1
q. providing enjoyment to the student through reading and discussion of selected texts written by great Islamic and Western Scholars.	5	4	3	2	1
r. constructing mutual relationships among concepts present in the three units of the curriculum, namely the philosophy, logic, and psychology units.	5	4	3	2	1
s. presenting philosophical thoughts suitable to the intellectual level of a Grade 2 Secondary Level student.	5	4	3	2	1
t. introducing concepts in the logic unit suitable to the intellectual ability of the Grade 2 secondary level student.	5	4	3	2	1
u. presenting illustrative examples in the three units of curriculum.	5	4	3	2	1

17. To what extent do you feel that the content of the Human Culture Curriculum for Grade III Secondary arts section has illustrated the following :

a. identifying the causes of the Islamic people's in the 19th century and first half of the 20th century?	5	4	3	2	1
b. identifying the most important active factors in the formation of modern Arabic thought?	5	4	3	2	1
c. defining modern Arabic thought in the educational, scientific, and social aspects?	5	4	3	2	1
d. identifying contemporary Arab and Islamic leaders in the education, science, and social disciplines?	5	4	3	2	1
e. identifying Arab and Islamic intellectual scholars in the Sultanate of Oman?	5	4	3	2	1
f. comparing modern Arab thought with its counterpart in the 9th, and 10th century A.D.?	5	4	3	2	1
g. presenting texts and excerpts as means of enabling the students to deduct direction of contemporary Arab thought?	5	4	3	2	1
h. instilling an appreciation of intellectual efforts and struggle taken by eminent Arab-Muslim Scholars?	5	4	3	2	1
i. optimistic view of the intellectual, scientific, and technological developments of Arabs in the future?	5	4	3	2	1
j. avoiding pitfalls of suspicions, illusions, mysticism, generalization, blind imitation and adherence to sound principles of research, inquiry, and invention?	5	4	3	2	1
k. emphasizing integration among all Islamic Scholars even if their means differ?	5	4	3	2	1
l. Ascertaining the emphasis of the diffusion of the ideas of the Islamic Scholars to all Islamic countries incontrast to diffusion within one country only?	5	4	3	2	1

PART II
SECTION B 1: "CLASSROOM ACTIVITIES"
METHODS OF INSTRUCTION
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning Methods of Instruction in the Secondary level. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Methods of Instructions in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. To what degree do your classroom procedures confirm with the objectives of the course you teach?..... 5 4 3 2 1

2. To what extent do you use the different methods of instruction suggested in the curriculum to suit below average, average and superior students?..... 5 4 3 2 1

3. When teaching assignments are made, to what degree is consideration given to factors such as :

   a. academic background of teachers?..... 5 4 3 2 1

   b. teaching expereince?..... 5 4 3 2 1

   c. preference of teachers?..... 5 4 3 2 1

4. To what degree do teachers' schedules include adequate time to make preparations for field and practical activities, as well as for classroom teaching?..... 5 4 3 2 1

5. To what extent does the school library (if any) include a good selection of professional books, periodicals, newsletters, or other current subject matter information?..... 5 4 3 2 1

6. To what degree are regular teacher meetings held to discuss problems of implementation and improvement of the Omani curriculum?..... 5 4 3 2 1

7. To what extent are students encouraged to question evidence, challenge loose thinking and develop hypotheses as an accepted part of classroom behavior?..... 5 4 3 2 1

8. To what extent are students encouraged to develop investigations on their own?..... 5 4 3 2 1

9. To what degree does studying society help students improve their communication skills through activities such as listening, reading, writing, and logical thinking?..... 5 4 3 2 1

PART II
SECTION B 2: "CLASSROOM ACTIVITIES"
STUDENT ASSESSMENT
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning Student Assessment in the Secondary level. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Omani Student Assessment in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. To what degree does your student assessment plan use techniques and instruments such as the following:

   a. non-written performance tests?..... 5 4 3 2 1

   b. objective tests?..... 5 4 3 2 1

   c. essay examinations?..... 5 4 3 2 1

   d. teacher observation?..... 5 4 3 2 1

2. To what degree does your assessment plan reflect balanced emphasis among conceptual schemes, process skills, social aspects and values and attitudes?..... 5 4 3 2 1

3. To what degree have secondary school teachers received In-Service or other training regarding assessment and performance measures?..... 5 4 3 2 1

4. To what extent do you provide a continual (daily, lesson-by-lesson, or unit-by-unit) evaluation of students in a formative manner.. 5 4 3 2 1

5. To what degree do your tests assess :

   a. recall of facts..... 5 4 3 2 1

   b. comprehension..... 5 4 3 2 1

   c. ability to analyze..... 5 4 3 2 1

   d. ability to apply..... 5 4 3 2 1

   e. problem-solving..... 5 4 3 2 1

6. To what extent is assessment of student achievement made in terms of success in meeting objectives specified by the curriculum..... 5 4 3 2 1

7. To what extent is student assessment used in revising and improving instructional activities?..... 5 4 3 2 1

8. To what degree do you prefer that the tests in secondary school be made by :

   a. teachers..... 5 4 3 2 1

   b. the school..... 5 4 3 2 1

   c. the school district..... 5 4 3 2 1

9. To what degree do the existing examinations in your school and school district account for individual differences of students?..... 5 4 3 2 1

10. To what extent do tests contain a few items simple enough for all students to answer?..... 5 4 3 2 1

11. To what extent are tests designed to avoid reading rate and comprehension contamination?..... 5 4 3 2 1

12. To what degree are the tests representative of different test item types (eg. true-flase, completions, multiple choice, etc.)?... 5 4 3 2 1

13. To what degree are test instructions clear and explicit?..... 5 4 3 2 1

14. To what extent are the test items clear and concise?..... 5 4 3 2 1

15. To what degree do you explain to the students the specific competencies (i.e., behaviors, skills, and concepts) that the students are to attain?..... 5 4 3 2 1

16. To what degree are test grades based on :

    a. Criterion reference..... 5 4 3 2 1

    b. Normative reference..... 5 4 3 2 1

17. To what extent is the assessment method used throughout instruction designed to provide:

    a. interim reports of student progress?..... 5 4 3 2 1

    b. specific diagnoses of student strengths and weaknesses?..... 5 4 3 2 1

    c. information to both the student and the teacher?..... 5 4 3 2 1

18. To what degree are final tests used to provide a basis on which grades for the course are assigned?..... 5 4 3 2 1

19. To what degree are tests used to provide data from which reports to parents and transcripts are prepared?..... 5 4 3 2 1

PART II
SECTION C 1: HUMAN AND PHYSICAL RESOURCES
(STAFF)
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning the Human Resources (Staff). Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Human Resources (Staff) in realizing its goals in accordance with the following criteria:

Fully.....(by 91% or more).....5
To a great extent....(by 61% to 90%).....4
Sometimes.....(by 31% to 60%).....3
Seldom.....(by 1% to 30%).....2
Rarely.....(by less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. To what degree are non-specialized teachers used to teach in the secondary school..... 5 4 3 2 1

2. To what extent does your school district have sufficient number of qualified supervisory personnel to assist in implementing the Omani Curriculum?..... 5 4 3 2 1

3. To what degree are secondary school teachers given released time for In-Service training to implement the Omani curriculum..... 5 4 3 2 1

4. To what extent does the Ministry of Education contribute to the professional improvement of the secondary school teachers?..... 5 4 3 2 1

5. How adequate are the school's policies for reviewing teacher assignments in terms of academic teaching and other qualifications?... 5 4 3 2 1

6. To what degree does your school district conduct In-Service workshops in implementing the Omani curriculum?..... 5 4 3 2 1

7. To what extent have the secondary school teachers participated in seminars, In-Service training and workshops dealing with recent developments in education..... 5 4 3 2 1

8. To what extent do teachers work with other teachers to coordinate teaching according to the Omani curriculum guidelines?..... 5 4 3 2 1

9. How adequate do you think the preparation of the teachers in learning theory and current teaching methods is in order to implement the Omani curriculum?..... 5 4 3 2 1

10. How adequate do you think the professional preparation of the teachers is, with regard to the subject-matter?..... 5 4 3 2 1

PART II
SECTION C 2: HUMAN AND PHYSICAL RESOURCES
(EQUIPMENT, FACILITIES & MATERIALS)
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning the Physical Resources (Equipment, Facilities & Materials). Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Physical Resources in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. To what extent are the classrooms adequate in number and size for the number of students in the class?..... 5 4 3 2 1

2. To what degree are adequate quantities of the following provided:

   a. books for teachers?..... 5 4 3 2 1

   b. books for students?..... 5 4 3 2 1

3. Rate the classrooms where you teach relative to the following characteristics:

   a. proper ventilation..... 5 4 3 2 1

   b. electrical outlets where needed..... 5 4 3 2 1

c. room darkening capability..... 5 4 3 2 1

d. adequate facilities for large and small group instruction and independent study.... 5 4 3 2 1

e. adequate space for storing equipment and materials..... 5 4 3 2 1

f. adequate space for student project work.... 5 4 3 2 1

4. To what extent are teachers instructed in the use of equipment and materials?..... 5 4 3 2 1

5. To what extent are teachers responsible for the selection of equipment and materials?..... 5 4 3 2 1

6. To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to:

a. teachers for instructional purposes?..... 5 4 3 2 1

b. students for project work?..... 5 4 3 2 1

c. students for team work?..... 5 4 3 2 1

d. students for individual work, both during and outside of classroom time?..... 5 4 3 2 1

7. To what extent are items of audio-visual equipment available for immediate use..... 5 4 3 2 1

8. To what extent are the materials, equipment and services in the school room kept in good working order?..... 5 4 3 2 1

PART II
SECTION D: TEXTBOOKS
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning the Textbooks. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Textbooks in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. To what degree does the student's textbook:

   a. reflect instructional objectives of the curriculum..... 5 4 3 2 1

   b. conform to the developmental stages of the students in terms of vocabulary readability and facilitating understanding..... 5 4 3 2 1

   c. satisfy needs and develop interests and motivations of students..... 5 4 3 2 1

   d. present characters or situations with which the student can identify..... 5 4 3 2 1

   e. help to develop critical thinking..... 5 4 3 2 1

   f. conform to the achievement level of the students..... 5 4 3 2 1

2. To what degree is the textbook satisfactory in terms of:

   a. logical sequencing of subject matter and learning tasks..... 5 4 3 2 1

   b. accuracy of information..... 5 4 3 2 1

   c. recency of information..... 5 4 3 2 1

   d. integration of the concepts and topics..... 5 4 3 2 1

   e. flexibility and variations between concepts, topics and textbook content..... 5 4 3 2 1

   f. integration between its content and other subject matters without unnecessary repetition..... 5 4 3 2 1

   g. its content and amount of instructional time allowed..... 5 4 3 2 1

3. If the textbook you use has exercises that are used as student homework or classwork, please answer the following questions:

   a. To what extent are there some exercises that help in diagnosing the weaknesses of the students?..... 5 4 3 2 1

   b. To what degree are the activities suggested in the textbook practicable?..... 5 4 3 2 1

   c. To what extent are the activities suitable to the students of this age group?..... 5 4 3 2 1

   d. To what extent does the student feel motivated in solving the exercise?..... 5 4 3 2 1

   e. To what degree are the questions suitable to the mental maturity level of the secondary age group?..... 5 4 3 2 1

4. To what degree is the textbook satisfactory in terms of :

   a. design and layout (titles, table of contents, tables, examples, etc.)..... 5 4 3 2 1

b. binding..... 5 4 3 2 1

c. type size..... 5 4 3 2 1

d. size of the book and the number of pages... 5 4 3 2 1

e. number, suitability, and usefulness of illustrations to assist in learning..... 5 4 3 2 1

f. illustrations using realistic proportions and comparisons in relation to nature and in relation to other objects..... 5 4 3 2 1

g. artistic quality and attractiveness of illustration..... 5 4 3 2 1

PART II
SECTION E: TEACHER MANUAL
SECONDARY LEVEL
(Teachers)

Introduction: The following is a list of statements concerning the Teacher Manual. Some of the statements are of a general nature; and some apply specifically to the curriculum you teach and implement. Please react to each statement by indicating your judgement as to the success of the Teacher Manual in realizing its goals in accordance with the following criteria:

Fully.....(91% or more).....5
To a great extent.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

Following each statement, please circle the number (only one) which reflects your evaluation:

1. To what extent does the teacher's manual offer adequate evaluation procedures of assessing:

   a. factual recall..... 5 4 3 2 1

   b. comprehension..... 5 4 3 2 1

   c. ability to analyze..... 5 4 3 2 1

   d. ability to apply..... 5 4 3 2 1

   e. problem-solving ability..... 5 4 3 2 1

2. To what extent is the content of the teacher's manual effectively communicated:

   a. presented clearly?..... 5 4 3 2 1

   b. recent and timely?..... 5 4 3 2 1

3. To what degree are the ideas, suggestions and activities presented in the teacher's manual:

a. useful and relevant..... 5 4 3 2 1

b. practical to implement..... 5 4 3 2 1

c. interesting and enjoyed by the students.... 5 4 3 2 1

d. fully involving the students..... 5 4 3 2 1

e. suitable for the learning capabilities of:

(i) below average students..... 5 4 3 2 1

(ii) average students..... 5 4 3 2 1

(iii) superior students..... 5 4 3 2 1

4. In the teacher's manual, to what degree are:

a. subject-matter topics and activities presented in a coherent, step-by-step manner?..... 5 4 3 2 1

b. instructional objectives stated?..... 5 4 3 2 1

c. if unstated, to what degree are instructional objectives obvious:

(i) to the teacher only..... 5 4 3 2 1

(ii) to both the teacher and the student.. 5 4 3 2 1

d. instructional objectives related to the subject matter?..... 5 4 3 2 1

e. objectives and procedures consistent?..... 5 4 3 2 1

f. these major learning outcomes represented:

(i) cognitive..... 5 4 3 2 1

(ii) affective..... 5 4 3 2 1

(iii) psychomotor..... 5 4 3 2 1

g. suggestions given for a variety of activities and ideas for classroom use?.... 5 4 3 2 1

5. To what extent are special skills or training required before the teacher can use the teacher's manual?..... 5 4 3 2 1

6. To what degree do you find these deficiencies in the teacher's manual?

a. presentation of subject matter is not orderly..... 5 4 3 2 1

b. teacher's manual is too conforming for the teacher..... 5 4 3 2 1

c. teacher's manual is too vague and lacks direction for the teacher..... 5 4 3 2 1

d. teacher's manual does not clearly define the expected student outcomes..... 5 4 3 2 1

7. To what extent are a variety of evaluation methods, besides paper and pencil tests suggested?..... 5 4 3 2 1

8. To what extent are the teaching materials and equipment suggested by the teacher's manual :

a. available..... 5 4 3 2 1

b. easy to use?

(i) by the teacher..... 5 4 3 2 1

(ii) by the students..... 5 4 3 2 1

9. To what degree is the teacher's manual helpful in:

a. Promoting the teacher's understanding of the concept in order to be able to present it in class..... 5 4 3 2 1

b. Suggesting new ideas to facilitate the students' understanding of the concepts.... 5 4 3 2 1

c. Suggesting extra charts and figures to facilitate the concept acquisition..... 5 4 3 2 1

d. Giving more examples and non-examples of each concept..... 5 4 3 2 1

e. Suggesting methods of presentation and ideas to relate the concepts to the everyday life activities of the students at this age..... 5 4 3 2 1

f. Providing the teacher with guidelines to design and select his own or the most relevant examples and non-examples of the concept to be taught..... 5 4 3 2 1

g. Providing the teacher ideas and examples to design assessment of the student's progress..... 5 4 3 2 1

10. To what degree does the teacher's manual effectively communicate:

a. the instructional objectives..... 5 4 3 2 1

b. the background needed to understand the subject matter?..... 5 4 3 2 1

c. the subject matter itself?..... 5 4 3 2 1

11. To what extent do the materials and suggestions in the teacher's manual encourage development of the following instructional processes:

a. listening..... 5 4 3 2 1

b. discussing..... 5 4 3 2 1

c. defining and explaining key terms and concepts..... 5 4 3 2 1

d. contrasting, comparing..... 5 4 3 2 1

e. recognizing various methods to solve problems..... 5 4 3 2 1

SUPERVISOR'S QUESTIONNAIRE

PART I

SECTION A: GENERAL INFORMATION

SECONDARY LEVEL

(FOR SUPERVISORS ONLY)

In front of the following items, please indicate the appropriate information pertaining to you as a secondary superviser by using (X) for such indication :

1. Sex : ---- Male ---- Female

2. Nationality : ---- Omani ---- Non-Omani

3. School District:

---- Muscat
---- Al-Roustaq
---- Al-Sharqiyah
---- Al-Dhahirah
---- Musandam
---- Al-Batinah
---- Al-Dhakhaliyah
---- Al-Wousta
---- Al-Janoubiyah

4. The Secondary grade level (class) in which you supervise:

---- First Grade
---- Second Grade
---- Third Grade

5. Subject-matter you supervise in Secondary level:

---- Islamic Studies
---- Arabic
---- Mathematics
---- Chemistry
---- Physics
---- Biology
---- General Science
---- History
---- Geography
---- Civics (omani Soc., Arabic Soc., Islamic Soc.)
---- Human Studies
---- Contemporary problems
---- English

6. Average number of teachers you supervise:

---- Less than 2o teachers
---- Between 21 to 50 teachers
---- Between 51 to 100 teachers
---- Between 101 to 500 teachers

7. Number of years you taught and supervise:

---- From one to three years
---- From four to six years
---- From seven to ten years
---- More than ten years

8. Number of years you supervised in the Sultanate of Oman:

---- From one to three years
---- From four to six years
---- From seven to ten years
---- More than ten years

9. Your Educational Preparation:

---- University Graduate (Educational Degree)

---- University Graduate (Non-Education Degree)

---- Graduate of Teacher Institute
(2 years after Secondary School)

---- Graduate of Teacher Institute
(1 year after Secondary School)

---- Graduate of Teacher Insititute
(5 years after Preparatory School)

---- Graduate of Teacher Institute
(3 years after Preparatory School)

10. Duration of In-Service Training in your area of specialization:

---- Did not attend any in-service training.

---- Less than a month.

---- From one to three months.

---- From four to six months.

---- From seven to twelve months.

---- From one to two years.

11. Where did you atttend your In-service training:

---- Sultanate of Oman.

---- Outside the Sultanate of Oman.

12. How many workshops did you attend in order to apply the Omani Curriculum effectively:

---- Did not attend any workshop.

---- One workshop

---- Two workshops

---- Three workshops

---- More than three workshops.

ADMINISTRATOR'S QUESTIONNAIRE

PART I

SECTION A: EDUCATIONAL ADMINISTRATORS INFORMATION

In front of the following items, please indicate the appropriate information pertaining to you as an Educational Administrator by using (X) for such indication :

1. Sex ---- Male ---- Female

2. Nationality ---- Omani ---- Non-Omani

3. Please check level of your administrative responsibilities:

   ____ Directorate of General Education

   ____ School District

   ____ School

4. Name your school district:

   ---- Muscat
   ---- Al-Batinah
   ---- Al-Roustaq
   ---- Al-Dhakhaliyah
   ---- Al-Sharqiyah
   ---- Al-Wousta
   ---- Al-Dhahirah
   ---- Al-Janoubiyah
   ---- Musandam

5. How many years did you teach before becoming an administrator

   ---- From one to three years
   ---- From four to six years
   ---- From seven to ten years
   ---- More than ten years

6. How many years have you been an administrator?

---- From one to three years
---- From four to six years
---- From seven to ten years
---- More than ten years

7. What is your occupational title?

---- Director in the Ministry of Education
---- Director in the school district
---- Technical Supervisor in the Curriculum Department
---- Technical Supervisor in General Education Department
---- Headmaster/Deputy Headmaster

8. What is the average number of teachers under your adminstration?

---- Less than 20
---- From 20 to 50
---- From 50 to 100
---- From 100 to 500
---- More than 500

9. What is your educational preparation? (check one)

---- College or University Degree (in Education)

---- College or University Degree (other than College of Education)

---- Teacher Training Institute (2 years after Secondary School)

---- Teacher Training Institute (1 year after Secondary School)

---- Teacher Training Institute (5 years after Preparatory School)

---- Teacher Training Institute (3 years after Preparatory School)

---- Secondary School Completed.

---- Preparatory School Completed.

---- Elementary School Completed.

10. What was the length of In-Service training you received in administrative preparation? (Please check one)

---- None

---- Less than one month

---- One to three months

---- Four to twelve months

---- One to two years

11. Where did you receive this In-Service training?

---- In Sultanate of Oman.

---- Outside the Sultanate of Oman.

12. How many workshops have you attended concerning the implementation of the Omani Curriculum?

---- None

---- One workshop

---- Two workshops

---- Three workshops

---- Four or more workshops

PARENT'S QUESTIONNAIRE

PART I
Section A. PARENT INFORMATION

Following are some statements. Please check with ( ) to indicate your situation:

1. Sex ---- Male ---- Female

2. Nationality ---- Omani ---- Non-Omani

3. What level of education have you completed? (check one)

   a. _____ University or College graduate

   b. _____ Attended Secondary School but did not graduate

   c. _____ Finished Preparatory School

   d. _____ Attended Preparatory School but did not graduate

   e. _____ Finished Primary School

   f. _____ Attended Primary School but did not graduate

   g. _____ Can read and write but hold no certificate

4. In what school district do you live?

   ---- Muscat

   ---- Al-Batinah

   ---- Al-Roustaq

   ---- Al-Dhakhaliyah

   ---- Al-Sharqiyah

   ---- Al-Wousta

   ---- Al-Dhahirah

   ---- Al-Janoubiyah

   ---- Musandam

5. How many children do you have registered in the Secondary School?

____	one	____	four
____	two	____	five
____	three	____	six
____	more than six		
____	I do not have any children in Primary School		

6. If you have children in Secondary School, in what grade(s) is each of your children enrolled?

_____ first grade
_____ second grade
_____ third grade

7. Have you had children who have finished Secondary School before 1981?

_____ Yes ____ No

8. Do you know about the new Omani curriculum implemented by the Ministry of Education since 1981-1982?

_____ Yes ____ No

9. From what sources did you get your information about the new Omani curriculum?

I heard about the Omani Curriculum:

____ a. When I was asked to give my opinion about the Omani curriculum.

____ b. From friends in the Ministry of Education & Youth.

____ c. From some of the teachers who instruct my child(ren).

____ d. Through information in the mass media

____ e. When I assisted my children with their homework.

10. How frequently do you participate in teacher-parent meetings? (Please check one)

____ a. All such meetings.

____ b. Sometimes

____ c. Never

PART I

SECTION B. PARENT OPINION SURVEY

Introduction: Below are several statements about the Omani Curriculum. Since we all think differently about such matters, this part of the parents' survey allows you express your beliefs and opinions. Respond to each of the statements as follows:

Mostly.....(91% or more).....5
Frequently.....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Rarely.....(1% to 30%).....2
Never.....(less than 1%).....1

For example, if you would like to indicate Mostly to one of the following statement circle "5". But if you should want to indicate Never, you would circle "1". Respond to each statement as best you are able.

---

1. My son/daughter has expereinced difficulties with the new Omani curriculum in:

a. Islamic Studies	5	4	3	2	1
b. Arabic	5	4	3	2	1
c. Geography	5	4	3	2	1
d. History	5	4	3	2	1
e. Human Culture	5	4	3	2	1
f. Civic Education	5	4	3	2	1
g. Physics	5	4	3	2	1
h. Chemistry	5	4	3	2	1
i. Biology	5	4	3	2	1
j. General Sciences	5	4	3	2	1
k. Mathematics	5	4	3	2	1
l. English	5	4	3	2	1

2.	My son/daughter is usually assigned enough homework.	5	4	3	2	1
3.	My son/daughter usually encounters difficulties in doing his/her homework in the following subjects:					
	a. Islamic Studies	5	4	3	2	1
	b. Arabic Language	5	4	3	2	1
	c. Geography	5	4	3	2	1
	d. History	5	4	3	2	1
	e. Human Culture	5	4	3	2	1
	f. Civic Education	5	4	3	2	1
	g. Physics	5	4	3	2	1
	h. Chemistry	5	4	3	2	1
	i. Biology	5	4	3	2	1
	j. General Sciences	5	4	3	2	1
	k. Mathematics	5	4	3	2	1
	l. English Language	5	4	3	2	1
4.	I usually hlep my son/daughter in doing his/her homework and find:					
	a. There is too much homework	5	4	3	2	1
	b. It is difficult for the son/daughter to do the homework on his/her own.	5	4	3	2	1
	c. I like to see the school work through my son/daughter homework.	5	4	3	2	1
5.	My son/daughter usually spends some time every day studying the subject matter that was taught to him/her that day.	5	4	3	2	1

6. My son/daughter usually spends his/her time after heshe comes from school in:

a. Doing his/her homework only	5	4	3	2	1
b. Studying the material that heshe covered that day in school.	5	4	3	2	1
c. Preparing for the next day's lessons	5	4	3	2	1
d. Doing activities related to the school curriculum.					
e. Watching TV and listening to the radio	5	4	3	2	1
f. Playing outside the house with his/her friends	5	4	3	2	1

7. Because of my son/daughter's textbooks are interesting, I usually read the following:

a. Islamic Studies textbooks	5	4	3	2	1
b. Arabic textbooks	5	4	3	2	1
c. Geography textbooks	5	4	3	2	1
d. History textbooks	5	4	3	2	1
e. Human Culture textbooks	5	4	3	2	1
f. Civic Education textbooks	5	4	3	2	1
g. Physics textbooks	5	4	3	2	1
h. Chemistry textbooks	5	4	3	2	1
i. Biology textbooks	5	4	3	2	1
j. General Sciences textbooks	5	4	3	2	1
k. Mathematics textbooks	5	4	3	2	1
l. English language textbooks	5	4	3	2	1

8. I feel that the textbooks that my son/daughter studies are:

a. well designed and printed	5	4	3	2	1
b. attractive and interesting	5	4	3	2	1
c. appropriate for his/her age	5	4	3	2	1

9. I feel that the content of my son/daughter's textbooks is:

a. well presented and easy to understand	5	4	3	2	1
b. supported with illustrations and pictures to make it easy to follow.	5	4	3	2	1
c. written in a manner that makes it easy for the son/daughter to read and understand.	5	4	3	2	1
d. written in a direct way and to the point manner.	5	4	3	2	1
e. suits the abilities of the son/daughter and stimulates his interest.	5	4	3	2	1
f. encourages the son/daughter to read.	5	4	3	2	1
g. motivates the son/daughter to do his/her homework.	5	4	3	2	1

10. I encourage my son/daughter to tell me about what goes on in his/her school. 5 4 3 2 1

11. My son/daughter always talks about the new Omani curriculum:

a. Enthusiastically	5	4	3	2	1
b. Negatively	5	4	3	2	1

12. My son/daughter usually shows that he/she likes:

a. The content included in his/her textbooks	5	4	3	2	1
b. The activities that he/she does related to the subject matter he/she is studying at school.	5	4	3	2	1

13. The Omani curriculum encourages my son/daughter to apply what he/she learned at school to everyday activities outside of school. 5 4 3 2 1

14. The Omani curriculum allows my son/daughter to grow intellectually form one year to the next. 5 4 3 2 1

15. I usually assess my son/daughter's progress by:

    a. Grade reports that he/she receives from the school. 5 4 3 2 1

    b. Meetings with his/her teachers. 5 4 3 2 1

16. I usually assess my son/daughter's progress by:

    a. His/Her interaction with the various family members. 5 4 3 2 1

    b. His/Her friends in the community 5 4 3 2 1

    c. His/Her interactions with the teachers 5 4 3 2 1

17. I feel that the Omani curriculum is suitable to educate my son/daughter, especially in introducing him/her to:

    a. The Islamic values 5 4 3 2 1

    b. The Arabic culture 5 4 3 2 1

    c. His Omani heritage 5 4 3 2 1

    d. Modern science and technology 5 4 3 2 1

STUDENTS QUESTIONNAIRE

STUDENTS: ARTS SECTION
PART I: GENERAL DATA

Below are several statements, please write or put the mark (X) on the statement that represent your case :

1. Sex : ---- Male ---- Female

2. Nationality : ---- Omani ---- Non-Omani

3. Educational District in which you study your Secondary Level:

---- Muscat

---- Al-Batinah

---- Al-Roustaq

---- Al-Dhakhaliyah

---- Al-Sharqiyah

---- Al-Wousta

---- Al-Dhahirah

---- Al-Janoubiyah

---- Musandam

PART II : GENERAL INSTRUCTIONS

This questionnaire is divided to five sections. Section I is about curricula and subject matters you have studied during your secondary level education, section II is about methods of teaching applied, section III is about the material facilities, section IV is about methods of assessment and section V is about the student's book.

Each section is composed of a set of questions or statements which describe one of the previous elements. They do not apply to specific classes or subjects, but they are general questions and statements which are applied to different forms of knowledge, abilities, directions and methods, acquired and applied during your secondary level studies in general.

You are kindly asked to answer these questions or to respond to these statements according to the following criteria:

Fully.....(by 91% or more).....5
To a great extent....(by 61% to 90%).....4
Sometimes.....(by 31% to 60%).....3
Seldom.....(by 1% to 30%).....2
Rarely.....(by less than 1%).....1

For example if your response to a certain question or statement is that it is fulfilled to a high degree or is highly effective, then make a cricle on (5). If your response is that it is sometimes fulfilled or that you can hardly judge, then make a circle on (3), and so on.

Please, for each question or statement make a circle on the number which best represents your point of view.

Section I

Curriculum and Subject-Matters

a. General

1. To what degree do you believe that subject-matters you are studying at the Secondary Level form an integrated and cohesive structure of information? 5 4 3 2 1

2. To what degree do you see subject-matters handle local environment in such a way that enable you to assess social needs and methods for achieving social objectives? 5 4 3 2 1

3. To what degree do subject-matters at the Secondary Level help you acquire the following basic skills :

   a. cognitive skills? 5 4 3 2 1

   b. social skills? 5 4 3 2 1

   c. psychomotor skills? 5 4 3 2 1

4. To what extent does the curriculum help you comprehend contemporary scientific and technological developments? 5 4 3 2 1

5. To what extent do your secondary studies help you discover, refine, and develop your talents,

   a. literary talents? 5 4 3 2 1

   b. scientific talents? 5 4 3 2 1

6. To what degree do you believe the curriculum for Secondary Level achieve balance among concepts, skills, social aspects, attitudes and values? 5 4 3 2 1

7. To what degree do you see the way subject-matter is studied, helps and guides you to sound scientific - thinking style in solv-ing-problems and in identifying basic processes such as induction, experimentation measurement, and deduction? 5 4 3 2 1

8. To what extent do your studies at Secondary Level contribute to your development of sound reading habits so that you would be able to continue researching topics you are interested in a variety of references? 5 4 3 2 1

9. To what extent does your study enable you to judge, discuss, and appreciate or reject what you read? 5 4 3 2 1

10. To what extent does your secondary study contribute to deepening your sense of self-respect, loyalty to country, and to all Arab homeland? 5 4 3 2 1

11. To what extent does this level of study develop in you a positive attitude towards environmental protection and natural resources conservation? 5 4 3 2 1

12. To what extent do subject-matter materials contribute to developing cooperative spirit, enjoyment of group work, and respect for other options? 5 4 3 2 1

13. To what extent do subject-matter materials at the Secondary Level encourage participation in class and extra-class activities and develop some interests such as: artistic, literary, scientific, and technological? 5 4 3 2 1

14. To what degree do you feel that the standard of the subject-matter material is appropriate for the age level in each grade? 5 4 3 2 1

15. To what degree do you feel that you benefited from what you studied in Grade 1 Secondary in the following subject-matters:

- Physics 5 4 3 2 1
- Chemistry 5 4 3 2 1
- Biology 5 4 3 2 1
- Mathematics 5 4 3 2 1

B. Subject-Matters

First : History

16. Educators define "concept" as a classification and organization of experiences in an established form based on patterned relationships that connect those experiences and give them specified names.

    In light of this detailed definition of "concept", to what extent does the History Curriculum for Grade 1 Sectiondary contribute to the illustration of the following concepts:

    a. Renaissance as one of the great events of contemporary periods? 5 4 3 2 1

    b. Geographic Explorations? 5 4 3 2 1

    c. Intellectual awakening? 5 4 3 2 1

    d. Industrial Revolution? 5 4 3 2 1

    e. Nationalistic enlightenment? 5 4 3 2 1

    f. European conferences? 5 4 3 2 1

    g. Unity and Federation? 5 4 3 2 1

    h. Martial laws? 5 4 3 2 1

    i. International relationships and treaties? 5 4 3 2 1

    j. International crises? 5 4 3 2 1

    k. Capitalism and Colonial competitiveness? 5 4 3 2 1

    l. Allies and Axis? 5 4 3 2 1

    m. League of Nations? 5 4 3 2 1

    n. United Nations? 5 4 3 2 1

17. To what extent does the History curriculum for grade 2 Secondary Literary contribute to the illustration and realization of the following concepts:

    a. Civilization? 5 4 3 2 1

b. Origin and characteristics of Islamic Civilization?	5	4	3	2	1
c. Illustrations of Islamic Civilization?	5	4	3	2	1
d. Effect of Islamic culture on European cultures?	5	4	3	2	1
e. Crusaders and Crusades?	5	4	3	2	1
f. Seljuks?	5	4	3	2	1
g. Mongols?	5	4	3	2	1
h. Land beyond the river?	5	4	3	2	1
i. Bysantines?	5	4	3	2	1
j. Islamic peace?	5	4	3	2	1
k. Class system in India?	5	4	3	2	1
l. Draphides and Aryons?	5	4	3	2	1
m. Islamic mini-states?	5	4	3	2	1
n. Memlouk sultans?	5	4	3	2	1
18. To what extent does the History Curriculum of Grade 3 Secondary (Literary) contribute to illustrating to following concepts:					
a. Arabian Gulf concept?	5	4	3	2	1
b. ancient near east?	5	4	3	2	1
c. Mesopotamia - land and culture?	5	4	3	2	1
d. Delmon culture and Mjan culture?	5	4	3	2	1
e. Helenic and Hellistic eras?	5	4	3	2	1
f. battles of Arabs?	5	4	3	2	1
g. navigation in the Arabia gulf through history?	5	4	3	2	1
h. European competition in the Arabian gulf?	5	4	3	2	1
i. Alya'ariba and the Busa'eeds?	5	4	3	2	1

j. era of Omani progress?	5	4	3	2	1
k. tales of Ibn Majid in the art of navigation?	5	4	3	2	1
l. religious sects?	5	4	3	2	1
m. the I'badiyah and its principles?	5	4	3	2	1
n. the Rustumians?	5	4	3	2	1

19. Skill is described as an individual's easy simple, and accurate conscious performance. Furthermore, skill can be seen as an initial muscular or cognitive performance.
In light of this definition of skills, could you illustrate to what extent the History curriculum realizes the following skills:

a. critical thinking?	5	4	3	2	1
b. social sensititvity?	5	4	3	2	1
c. analysis and solution of problems?	5	4	3	2	1
d. identifying sources of information?	5	4	3	2	1
e. information gathering, organization, and evaluation?	5	4	3	2	1
f. comprehensive listening and reading, and library usage?	5	4	3	2	1
g. intelligent conversation and writing?	5	4	3	2	1
h. interpretation of historical and periodic maps?	5	4	3	2	1
i. interpretation of graphs, data, models, and drawings?	5	4	3	2	1
j. interpretation and analysis of current events?	5	4	3	2	1
k. use of time concepts?	5	4	3	2	1
l. participation in group activities?	5	4	3	2	1
m. interpretation of the present, perception of nature, and goals of change?	5	4	3	2	1

n. illustration of future direction? 5 4 3 2 1

o. development of attitude of loyalty to country? 5 4 3 2 1

p. development of scientific thinking and scientific skills? 5 4 3 2 1

q. development of research and report writing? 5 4 3 2 1

r. organization of field-trips and celebration of events? 5 4 3 2 1

Second : Geography

20. Geography is crystallized in a group of basic concepts and relationships between man and society.
To what degree do you feel you have comprehended those concepts and relationships so that you are able to discuss them and give an opinion about them :

a. characteristics of Omani environment and its natural, social, economic, and political constituents? 5 4 3 2 1

b. characteristics of Gulf environment and its natural, social, economic, and political constituents? 5 4 3 2 1

c. appreciation of efforts carried on by Omani, Gulf and Arabian and Muslim countries in order to solve their economic and social problems? 5 4 3 2 1

d. realization of Omani progress in social, economic, and political fields? 5 4 3 2 1

e. understanding of local community problems and developmental projects? 5 4 3 2 1

f. realization of interaction between man and environment? 5 4 3 2 1

g. identifying methods of exploitation and conservation of natural resources? 5 4 3 2 1

21. To what degree do you feel that you have achieved the following skills while studying geography:

a. conducting geography related research?	5	4	3	2	1
b. writing research paper and reports and using reference?	5	4	3	2	1
c. following current events and acquisition of the ability to distinguish between valuable and invaluable information provided by mass media?	5	4	3	2	1
d. drawing of maps, statistical charts, graphs, models, and posters?	5	4	3	2	1
e. reading maps, data, graphs, charts and models?	5	4	3	2	1
f. usage of compass and maps to identify earthly forms and locating your position on the map?	5	4	3	2	1

Third : Civil Education and Human Culture

22. To what extent did the Civil Education curriculum for Grade 1 Secondary contribute to illustrating the following concepts:

a. culture and its relationship to society?	5	4	3	2	1
b. society in the Islamic context?	5	4	3	2	1
c. the family, norms, values, and development?	5	4	3	2	1
d. Omani values, traditions, and heritage?	5	4	3	2	1
e. relics, fortresses, and castles?	5	4	3	2	1
f. exhibitions, museums, and transcripts?	5	4	3	2	1
g. traditional professions?	5	4	3	2	1
h. population activities?	5	4	3	2	1
i. state activities?	5	4	3	2	1

j. social institutions?	5	4	3	2	1
k. oil, gas and development?	5	4	3	2	1
l. the Council for Development?	5	4	3	2	1

23. To what extent does the Unit "Arab Society" in the Civil Education Curriculum for Grade 2 Secondary (Literary) contribute toward illustrating the following concepts:

a. concept of location and site?	5	4	3	2	1
b. concept of culture?	5	4	3	2	1
c. value system?	5	4	3	2	1
d. Arabian cultural heritage?	5	4	3	2	1
e. the foundations of Arab nation?	5	4	3	2	1
f. demographic characteristic?	5	4	3	2	1
g. relationships between resources, population and population problems?	5	4	3	2	1
h. science of economy and its characterisitics	5	4	3	2	1
i. economic development?	5	4	3	2	1
j. strategy of social work?	5	4	3	2	1
k. adult education and literacy?	5	4	3	2	1
l. Arab leagues educational, cultural and scientific organization (ALECSO)?	5	4	3	2	1
m. united nation educational, scientific, and cultural organization (UNESCO)?	5	4	3	2	1

24. To what extent does the unit (the present of the Islamic World) in the Civil Education Curriculum for Grade 3 Secondary (Literary) illustrate the following concepts:

a. concept of Islamic civilization?	5	4	3	2	1
b. Islamic view of the universe, man and life?	5	4	3	2	1

c. Islamic culture?	5	4	3	2	1
d. Islamic Education?	5	4	3	2	1
e. social system in Islam?	5	4	3	2	1
f. goal of life in Islam?	5	4	3	2	1
g. cultural characteristics of Muslim peoples?	5	4	3	2	1
h. beliefs and basic thoughts of Islam?	5	4	3	2	1
i. Non-Arab Islamic states?	5	4	3	2	1
j. Muslim minorities?	5	4	3	2	1
k. Organization of Islamic conference?	5	4	3	2	1
l. importance of contemporary Muslim world?	5	4	3	2	1
m. Horizons of contemporary Muslim world?	5	4	3	2	1

25. To what extent does the Human Culture curriculum for Grade 2 Secondary (literary) contribute to illustrating the following concepts:

a. philosophic thought?	5	4	3	2	1
b. sound thinking?	5	4	3	2	1
c. basic psychology concepts?	5	4	3	2	1
d. philosophy: meaning, divisions, and benefits?	5	4	3	2	1
e. logic: definition, divisions, and benefits?	5	4	3	2	1
f. jurisprudence and issues?	5	4	3	2	1
g. direct inference?	5	4	3	2	1
h. analogical deduction and induction?	5	4	3	2	1
i. misleadings?	5	4	3	2	1
j. methods of research and thinking?	5	4	3	2	1

k.	referencing and footnoting?	5	4	3	2	1
l.	development: concept, directions, and affecting factors?	5	4	3	2	1
m.	perception and attention?	5	4	3	2	1
n.	intelligence, realizm, and enthusiasm?	5	4	3	2	1
o.	personality, attitudes, and values?	5	4	3	2	1

26. To what extent does the Islamic World Today Curriculum for Grade 3 Secondary (literary) contribute to the illustration of the following concepts:

a.	modern Arabic thought?	5	4	3	2	1
b.	educational thought?	5	4	3	2	1
c.	scientific thought?	5	4	3	2	1
d.	social thought?	5	4	3	2	1
e.	contemporary education and its problems?	5	4	3	2	1
f.	basic, applied, and developmental type of scientific research?	5	4	3	2	1
g.	technological development and social change?	5	4	3	2	1
h.	means of communication, and their effects on culture?	5	4	3	2	1
i.	originality of contemporarism?	5	4	3	2	1
j.	Islamic university?	5	4	3	2	1
k.	modernization and nations' happiness?	5	4	3	2	1
l.	Periodists?	5	4	3	2	1
m.	nationalism and humanity?	5	4	3	2	1
n.	Wehabite?	5	4	3	2	1

27. To what extent does the Civil Education and Human Culture Curricula for secondary level contribute to the realization of the following skills :

a. acquisition of skills that satisfy students' needs?	5	4	3	2	1
b. acquisition of skills that satisfy society's needs of manpower?	5	4	3	2	1
c. moderating of open disucssion?	5	4	3	2	1
d. writing of reports?	5	4	3	2	1
e. performing of excercises?	5	4	3	2	1
f. performance of clerical work?	5	4	3	2	1
g. usage of textbook as a source of learning?	5	4	3	2	1
h. performance of environmental appointing?	5	4	3	2	1
i. performance of different surveys?	5	4	3	2	1
j. usage of school library as a source of learning?	5	4	3	2	1
k. enrichment reinforcement and increasing the effect of learning?	5	4	3	2	1
l. reference to appropriate resources in the library?	5	4	3	2	1
m. organization of field trips and celebration of religious, nationalistic, local and universal events?	5	4	3	2	1

Fourth : Arabic Language

28. As you have studied grammar and inference topics :

- To what extent did you acquire grammatical skills?	5	4	3	2	1
- To what extent did you acquire language habits?	5	4	3	2	1

29. As you have studied critique and eloquence topics :

- To what extent was your interest for reading in critique and eloquence excited? 5 4 3 2 1
- To what extent was your literary appreciation sense developed? 5 4 3 2 1

30. As you have studied reading topics :

- To what extent did they contribute to your grammar and thought resources? 5 4 3 2 1
- To what extent did they contribute to your acquisition of technical and practical styles and attitudes? 5 4 3 2 1

31. As you have studied Literary Text topics:

- To what extent did they contribute to your developing literary appreciation? 5 4 3 2 1
- To what extent did they help you make sound literary judgements on your readings? 5 4 3 2 1
- To what extent did they help you achieve the skill of criticism? 5 4 3 2 1
- To what extent do you depend on youself in analyzing some literary texts? 5 4 3 2 1

32. In light of your having studied History of literature and biographies :

- To what degree do you agree on specifying grade 2 and grade 3 literary, and not Grade 1, with studying History of Literature and Biographies? 5 4 3 2 1
- To what extent do you agree that History of Literature is to be studied by narrating of literary facts without use of text analysis first and later inference of facts from them? 5 4 3 2 1
- To what degree do you agree that literary Biographies are to be studied by narrating of literary facts and metnioning of examples of the works of the biographee without analyzing them, and infering specifics for them? 5 4 3 2 1

- To what extent is there coherence of studying History of Literature and selected literary texts (poems and prose) of the same period? 5 4 3 2 1

33. In light of what you studied from prosody and poetic rhyme :

- To what extent do you agree that this branch of language is to be taught to students of the literary section of the secondary level? 5 4 3 2 1

- To what extent are the selected topics for the literary section grades appropriate for student's capabilities and aptitudes? 5 4 3 2 1

- To what extent are these two branches (prosody and rhyme) in accord with your interests, concerns, and needs? 5 4 3 2 1

- To what extent are you able to understand prosody terminology and their application to poetic phrases? 5 4 3 2 1

- To what extent are you able to acquire skill in identifying phonetic syllables and their corresponding symbols, and poetic footings? 5 4 3 2 1

- To what extent are you able to refer poetic verses to their poetic rythems? 5 4 3 2 1

- To what extent is poetic scanning difficult for you? 5 4 3 2 1

- To what extent is it difficult for you to correspond phonetic syllables that represent phonetic units with their appropriate symbols and footings? 5 4 3 2 1

- To what extent is the sum of prosody terminology much for you? 5 4 3 2 1

- To what extent are resemblance of verse compositions confusing for you? 5 4 3 2 1

Fifth: Islamic Education

34. To what extent are the practical performances of Islamic Liturgy :

    a. an integrated part in Islamic Education? 5 4 3 2 1

    b. a basic part in method of teaching of Islamic Education? 5 4 3 2 1

35. The six aspects of the Islamic Education curriculum are :
    The Quran, The Hadith, Belief (A'keedah) Worship, The Prophet's Biography, and Islamic Systems.
    To what degree do you feel that some degree of continuity and integration was realized among these aspects as a result of the way the curriculum treated these aspects? 5 4 3 2 1

36. To what extent does the Islamic Education subject matter emphasize the historical aspects of Islam? 5 4 3 2 1

37. To what extent does the Islamic Education subject-matter help you develop basic attitudes and skills of logical thinking namely :

    a. deductive thinking : application of general principles on special cases? 5 4 3 2 1

    b. inductive thinking : arriving at a general principle or rule from special cases? 5 4 3 2 1

38. To what extent do the Islamic Education Subject-matter encourage you to read extra-curricularly Islamic reference and major books? 5 4 3 2 1

39. The Islamic Education Curriculum for Secondary Level is constituted as six separate lessons corresponding to six aspects of Islamic Education. To what degree do you see the separate lesson method as actualizing the intended integration of these aspects? 5 4 3 2 1

40. The Islamic Education Curriculum aims at achieving at the Secondary Levels certain objectives. To what extent were the following objectives realized:

a. completing the building of an integrated Islamic personality by considering all developmental domains namely: physical spiritual, cognitive and behaviour?	5	4	3	2	1
b. developing and stabilizing loyalty to GOD, belonging to the Islamic nation, and pride in Islam as belief and as system of life?	5	4	3	2	1
c. reinforcing behaviour based on commitment to Islamic teachings and refuting non-Islamic principles and teachings for individual and group behavior?	5	4	3	2	1
d. developing positive attitudes based on Islamic teachings that will help a Muslim confront contemporary challenges?	5	4	3	2	1
e. identify Islamic systems that warns against disadvantages of man-made systems so as to be able to confront challenges of non-Islamic intellectual and cultural invasion to which a Muslim may be exposed to in contemporary life?	5	4	3	2	1

Sixth : General Science

41. The General Science subject matter for Grade 2 and 3 Literary is comprised of several topics that represent some contemporary problems in himan society. To what degree has satisfactorily comprehension of the following problems enabled you to participate in discussing and suggesting solutions :

a. science and scientists?	5	4	3	2	1
b. science and man's health?	5	4	3	2	1
c. science and the world food problem?	5	4	3	2	1
d. the universe?	5	4	3	2	1

e. transportation? 5 4 3 2 1

f. communication? 5 4 3 2 1

g. oil? 5 4 3 2 1

h. solar energy? 5 4 3 2 1

i. nuclear energy? 5 4 3 2 1

j. environment and pollution? 5 4 3 2 1

k. meteorology and weather forecasting? 5 4 3 2 1

Seventh : Mathematics

Mathematics at the Secondary Level is a group of integrated topics. In each topic there are related concepts, mathematical terminology, and generalizations that provide students with necessary skills.

42. To what extent did you comprehend the following concepts and skills :

a. laws of exponents and logarithms? 5 4 3 2 1

b. exponential functions and logarithmic functions? 5 4 3 2 1

c. regular calculation principle, binomial theory, and factorization? 5 4 3 2 1

d. summation and the use of symbol (E)? 5 4 3 2 1

e. seriies and progressions, and finding the general term? 5 4 3 2 1

f. linear equations in two variables? 5 4 3 2 1

g. finding the solution set, and identifying the solution area? 5 4 3 2 1

h. concept of limit of a finite function? 5 4 3 2 1

i. finding the derivative of a function and its geometric interpretation? 5 4 3 2 1

j. finding the derivative of the product of two functions? 5 4 3 2 1

k. finding the derivative of the division of two functions? 5 4 3 2 1

l. concepts of maima of functions? 5 4 3 2 1

m. concept of the theory of maxima? 5 4 3 2 1

n. curve plotting? 5 4 3 2 1

o. concept of integrals and finding the integration of polynomial functions? 5 4 3 2 1

p. calculations of areas and volumes by integration? 5 4 3 2 1

q. concept of statistics? 5 4 3 2 1

r. finding measures of central tendency and variation? 5 4 3 2 1

s. finding correlation coefficient? 5 4 3 2 1

t. concept of uniform probability? 5 4 3 2 1

u. finding probability and probable distibution? 5 4 3 2 1

v. perform calculations on the random variable and its concept? 5 4 3 2 1

w. application of probability rules and laws on life situations and excercises? 5 4 3 2 1

Eight . English

43. To what extent do you feel that the English Language curriculum realized the following objectives :

a. enriched your knowledge about the outside world? 5 4 3 2 1

b. provided you with basic English language skills that enable you to express yourself in written and oral English with foreign nationals in and outside Oman? 5 4 3 2 1

c. enabled you to use English effectively and creatively in both casual and formal situations? 5 4 3 2 1

d. encouraged you to read books, journals and magazines in English outside the curriculum? 5 4 3 2 1

44. To what extent does the English language curriculum content provide you with exercises and drills enabling you to master the folloiwng basic skills :

a. listening? 5 4 3 2 1

b. speaking? 5 4 3 2 1

c. reading? 5 4 3 2 1

d. writing? 5 4 3 2 1

e. comprehension? 5 4 3 2 1

45. To what extent does the English Language curriculum emphasize the following :

a. silent reading speed and comprehension? 5 4 3 2 1

b. reading aloud with fluency and precise pronunciation? 5 4 3 2 1

46. To what extent were English language cassettes useful to you in regard to :

a. providing good pronunciation model? 5 4 3 2 1

b. promoting and practicing listening comprehension? 5 4 3 2 1

c. presenting difficult materials such as dialogs and songs? 5 4 3 2 1

47. To what extent were the "Reading for Information Texts" useful to you in regard to:

a. simulating essays and stories from newspapers or magazines? 5 4 3 2 1

b. encouraging your rapid silent reading of quite difficult texts in order to extract the main points and factual information? 5 4 3 2 1

48. To what extent was the English Language curriculum successful in enabling you to master the following functional skills:

a. feeling at ease with the English language so you could give simple instructions and directions in a sequential manner? 5 4 3 2 1

b. understand the link of events in the past and accept and acknowledge social invitations in the appropriate tone and form? 5 4 3 2 1

c. use proper forms of greeting and congratulatory statements? 5 4 3 2 1

d. describe personal features of people? 5 4 3 2 1

49. To what degree does the English Language curriculum content cover specialized vocabulary from the linguistics point of view which would enable you to continue studies at the university level and be able to communicate in respect to :

a. the personal domain? 5 4 3 2 1

b. the social domain? 5 4 3 2 1

c. the national domain? 5 4 3 2 1

d. the international domain? 5 4 3 2 1

e. the scientific domain? 5 4 3 2 1

f. the literary and cultural domain? 5 4 3 2 1

g. the geo-political domain? 5 4 3 2 1

50. To what extent does the English Language Curriculum encourage you to think creatively and independently? 5 4 3 2 1

SECTION II
METHODS OF TEACHING

1.	To what degree do you see that the teacher relates subject matter to life situations and practical excercises?	5	4	3	2	1
2.	To what extent does the teacher employ a variety approaches appropriate to the nature of the subject matter?	5	4	3	2	1
3.	To what degree do you feel the teacher employs several methods of teaching appropriate to different students' abilities including the high achievers, average and weak achievers?	5	4	3	2	1
4.	To what extent does the teacher encourage independent learning approach, e.g. students performance of researches, studies and experiments by themselves?	5	4	3	2	1
5.	To what extent does the teacher employ project or team approach when conducting lessons?	5	4	3	2	1
6.	To what extent does the teacher employ different instructional media in lesson demonstration?	5	4	3	2	1
7.	To what extent does the teacher's approaches encourage teacher-pupil interaction and allow students' to express opinions?	5	4	3	2	1
8.	From your point-of-view, what degree of integration exists between textbook contents and the teacher's class activities?	5	4	3	2	1
9.	To what extent do methods of teaching at the Secondary level help you develop the following critical thinking habits and attitudes :					
	a. suspending judgement?	5	4	3	2	1
	b. investigate accuracy of data?	5	4	3	2	1
	c. evaluating data resources?	5	4	3	2	1
	d. employing a variety of information resources?	5	4	3	2	1

SECTION III
MATERIAL FACILITIES

1.	To what degree do you feel that your Secondary School is an educational environment for the students cognitive development?	5	4	3	2	1
2.	What is your judgement of classroom facilities from the following perspectives: space, furniture, lighting, ventilation, equipment and apparatus?	5	4	3	2	1
3.	To what extent was school laboratory useful in the following aspects:					
	a. ensuring the comprehension of theoretical-concepts you have already studied?	5	4	3	2	1
	b. acquisition skillful use and manipulation of laboratory apparatus and materials?	5	4	3	2	1
	c. schematizing results, drawing graphs, and writing lab-reports?	5	4	3	2	1
4.	To what extent was school library useful in the following aspects:					
	a. identify library reference system and fast location of required references?	5	4	3	2	1
	b. reading references related to subject-matter?	5	4	3	2	1
	c. general reading and general culture?	5	4	3	2	1
5.	To what degree do you feel that instructional media available at your school is adequate and appropriate for the Secondary Level subject-matters?	5	4	3	2	1
6.	To what extent are the following places and facilities related to different activities sufficient and appropriate :					
	a. clubs?	5	4	3	2	1
	b. fairs?	5	4	3	2	1
	c. sport stadiums?	5	4	3	2	1
	d. theatres?	5	4	3	2	1
	e. mosque?	5	4	3	2	1

SECTION IV
EVALUATION

1. Evaluation process at the Secondary Level often includes several tests. To what degree do you feel the following tests are appropriate for the Secondary level student:

   a. objective-question tests: true-false, completion, multiple-choice? 5 4 3 2 1

   b. subjective tests: student is asked to answer in detail? 5 4 3 2 1

   c. performance tests: laboratory experiments? 5 4 3 2 1

2. To what degree do you see that the tests you had at the Secondary level measure the following :

   a. retention of facts? 5 4 3 2 1

   b. understanding? 5 4 3 2 1

   c. ability to analyze? 5 4 3 2 1

   d. ability to apply? 5 4 3 2 1

   e. problem-solving? 5 4 3 2 1

3. To what extent did the teacher depend on :

   a. lesson stage tests? 5 4 3 2 1

   b. monthly periodic tests? 5 4 3 2 1

   c. final tests? 5 4 3 2 1

STUDENTS: SCIENCE SECTION
PART I: GENERAL DATA

Below are several statements, please write or put the mark (X) on the statement that represent your case :

1. Sex : ---- Male ---- Female

2. Nationality : ---- Omani ---- Non-Omani

3. Educational District in which you study your Secondary Level:

---- Muscat
---- Al-Batinah
---- Al-Roustaq
---- Al-Dhakhaliyah
---- Al-Sharqiyah
---- Al-Wousta
---- Al-Dhahirah
---- Al-Janoubiyah
---- Musandam

PART II : GENERAL INSTRUCTIONS

This questionnaire is divided to five sections. Section I is about curricula and subject matters you have studied during your secondary level education, section II is about methods of teaching applied, section III is about the material facilities, section IV is about methods of assessment and section V is about the student's book.

Each section is composed of a set of questions or statements which describe one of the previous elements. They do not apply to specific classes or subjects, but they are general questions and statements which are applied to different forms of knowledge, abilities, directions and methods, acquired and applied during your secondary level studies in general.

You are kindly asked to answer these questions or to respond to these statements according to the following criteria:

Fully.....(by 91% or more).....5
To a great extent....(by 61% to 90%).....4
Sometimes.....(by 31% to 60%).....3
Seldom.....(by 1% to 30%).....2
Rarely.....(by less than 1%).....1

For example if your response to a certain question or statement is that it is fulfilled to a high degree or is highly effective, then make a cricle on (5). If your response is that it is sometimes fulfilled or that you can hardly judge, then make a circle on (3), and so on.

Please, for each question or statement make a circle on the number which best represents your point of view.

Section I

Curriculum and Subject-Matters

a. General

1. To what degree do you believe that subject-matters you are studying at the Secondary Level form an integrated and cohesive structure of information? 5 4 3 2 1

2. To what degree do you see subject-matters handle local environment in such a way that enable you to assess social needs and methods for achieving social objectives? 5 4 3 2 1

3. To what degree do subject-matters at the Secondary Level help you acquire the following basic skills :

   a. cognitive skills? 5 4 3 2 1

   b. social skills? 5 4 3 2 1

   c. psychomotor skills? 5 4 3 2 1

4. To what extent does the curriculum help you comprehend contemporary scientific and technological developments? 5 4 3 2 1

5. To what extent do your secondary studies help you discover, refine, and develop your talents,

   a. literary talents? 5 4 3 2 1

   b. scientific talents? 5 4 3 2 1

6. To what degree do you believe the curriculum for Secondary Level achieve balance among concepts, skills, social aspects, attitudes and values? 5 4 3 2 1

7. To what degree do you see the way subject-matter is studied, helps and guides you to sound scientific - thinking style in solv-ing-problems and in identifying basic processes such as induction, experimentation measurement, and deduction? 5 4 3 2 1

8. To what extent do your studies at Secondary Level contribute to your development of sound reading habits so that you would be able to continue researching topics you are interested in a variety of references? 5 4 3 2 1

9. To what extent does your study enable you to judge, discuss, and appreciate or reject what you read? 5 4 3 2 1

10. To what extent does your secondary study contribute to deepening your sense of self-respect, loyalty to country, and to all Arab homeland? 5 4 3 2 1

11. To what extent does this level of study develop in you a positive attitude towards environmental protection and natural resources conservation? 5 4 3 2 1

12. To what extent do subject-matter materials contribute to developing cooperative spirit, enjoyment of group work, and respect for other options? 5 4 3 2 1

13. To what extent do subject-matter materials at the Secondary Level encourage participation in class and extra-class activities and develop some interests such as: artistic, literary, scientific, and technological? 5 4 3 2 1

14. To what degree do you feel that the standard of the subject-matter material is appropriate for the age level in each grade? 5 4 3 2 1

15. To what degree do you feel that you benefited from what you studied in Grade 1 Secondary in the following subject-matters:

- History 5 4 3 2 1
- Geography 5 4 3 2 1
- Civic Education 5 4 3 2 1

B. Chemistry

16. Chemistry subject-matter in Secondary Level is constructed as a number of units each constitutes a group of basic concepts. To what degree do you feel that you have understood the concepts sufficiently to refer easily, when needed to the following concepts:

a. behavior of matter as a basis of the structure of atom?	5	4	3	2	1
b. chemical reactions, and the conept of chemical equation?	5	4	3	2	1
c. behavior of gases and the gas laws?	5	4	3	2	1
d. characteristics of liquids and solids and the effect of heat on their molecules?	5	4	3	2	1
e. electrical conductivity and the electric nature of matter?	5	4	3	2	1
f. atomic structure and the periodic table of elements?	5	4	3	2	1
g. chemical bonds and molecular structure?	5	4	3	2	1
h. energy changes in chemical reactions?	5	4	3	2	1
i. speed of chemical reactions?	5	4	3	2	1
j. dynamic equillibrium in chemical reactions?	5	4	3	2	1
k. acids and basis?	5	4	3	2	1
l. oxidation and reduction?	5	4	3	2	1
m. organic compounds?	5	4	3	2	1
n. chemistry of living matter?	5	4	3	2	1
o. halogines?	5	4	3	2	1
p. alkaline earthes?	5	4	3	2	1
q. elements of the third period of the periodic table?	5	4	3	2	1
r. transition elements?	5	4	3	2	1
s. radio activity and nuclear changes?	5	4	3	2	1

17. Chemistry Curriculum at the Secondary Level contains several exercises, laboratory experiments, and practical activities that aim to develop special skills and concepts included in the units. To what degree do you feel that in implementing these activities and laboratory applications - you have acquired the following skills:

a. performing laboratory experiments to study:

1 - relationships between volume, pressure, and temperature of gases?	5	4	3	2	1
2 - measuring the melting point of a pure material?	5	4	3	2	1
3 - measuring the heat of reaction and the heat of neutralization?	5	4	3	2	1
4 - studying the effect of a catalyst through studying chemical equiliibrium?	5	4	3	2	1
5 - electro-chemical analysis of water and ionized solutions?	5	4	3	2	1
6 - electroplating copper and silver?	5	4	3	2	1
7 - relations between the number of moles of electrons and atoms in copper and silver?	5	4	3	2	1
8 - volume hydrogen produced by reaction of acid and metal?	5	4	3	2	1
9 - identification of gases through flame test?	5	4	3	2	1
10- properties of elements and their reactions & structures in compounds?	5	4	3	2	1
11- finding the solubility product of a compound?	5	4	3	2	1
12- acid-alkali reactions, titration and use of indicators?	5	4	3	2	1
13- preparation of organic compounds and identifying their characteristics?	5	4	3	2	1

14- test for sugar, starch, and proteins? 5 4 3 2 1

15-comparison of degrees of water-hardness? 5 4 3 2 1

16- studying the properties of some gases of vital importance? 5 4 3 2 1

b. Knowledge of natural resources in Oman from your visits to fields and mines where these ores are extracted? 5 4 3 2 1

c. manipulation of laboratory apparatus of chemistry experiments, handling concentrated acids, and dangerous materials? 5 4 3 2 1

C. Physics

18. Physics subject-matter at the Secondary Level consists of several independent units each including a group of main concepts. To what degree do you feel you have comprehended the following concepts so that you can refer to them in solving related problems:

a. concepts of measurements, fundamental and derived units of physical quantities? 5 4 3 2 1

b. concepts of motion, force, work, energy and power? 5 4 3 2 1

c. concepts of hydrostatics and hydro-dynamics? 5 4 3 2 1

d. concepts concerning laws of conservation of mass and energy? 5 4 3 2 1

e. concepts of heat and thermodynamics? 5 4 3 2 1

f. waves and combinations of waves? 5 4 3 2 1

g. concepts concerning forces and fields :

1 - electric field? 5 4 3 2 1

2 - magnetic field? 5 4 3 2 1

3 - gravitational field? 5 4 3 2 1

h. conepts concerning development of atomic structure and modern quantum theory? 5 4 3 2 1

i. concepts concerning nucleus and natural and artifical radioactivity? 5 4 3 2 1

19. Physics Curriculum contains a group of practical exercises and activities that aim develope students's skills and concepts presented in units. To what degree do you feel that-through performing these activities and practical exercises-you have acquired the following skills :

a. dealing with fundamental units of physical quantities and deriving and applying other units? 5 4 3 2 1

b. defining errors and degree of accuracy of measurement? 5 4 3 2 1

c. using appropriate equipment to measure the following:

1 - different lengths using vernier, micrometer, and spherometer, and calculation of areas and volumes? 5 4 3 2 1

2 - masses, using balances with different sensitivities and calculation of density? 5 4 3 2 1

3 - time, using stop watches, ticker timer and stroposcope, and calculation of velocity and acceleration? 5 4 3 2 1

4 - force, using spring balance? 5 4 3 2 1

5 - circular motion and calculation of moments and moments of inertia? 5 4 3 2 1

6 - liquid pressure, upthrust, speed of liquids, and viscosity? 5 4 3 2 1

d. performing experiments to illustrate or verify the folloiwng relations :

1 - melting point of naphthaline or wax? 5 4 3 2 1

2 - relation between volume of gas and its pressure at constant temperature?	5	4	3	2	1
3 - relation between volume of gas and its temperature at constant pressure?	5	4	3	2	1
4 - relation between length of a spring and the force of exerted on it?	5	4	3	2	1
5 - getting the resultant of two vectors?	5	4	3	2	1
6 - velocity of falling bodies and acceleration due to gravity?	5	4	3	2	1
7 - measurement of the uplifting force of a liquid and verification of Archemides rule?	5	4	3	2	1
8 - measuring liquid velocity and coefficient of viscosity?	5	4	3	2	1
9 - specific heats of solids and liquids?	5	4	3	2	1
10- mechanical equivalent of heat?	5	4	3	2	1
11- transfer of energy from one form to another?	5	4	3	2	1
12- wave combinations and standing waves?	5	4	3	2	1
13- diffraction of waves and application of diffraction greating?	5	4	3	2	1
14- measuring small distances using interferometry?	5	4	3	2	1
15- photo-electric effect?	5	4	3	2	1
16- finding blank's constant?	5	4	3	2	1
17- ratio of electron charge to its mass?	5	4	3	2	1
e. graphic representation of results?	5	4	3	2	1
f. representing relations in Physics by mathematical expressions?	5	4	3	2	1
g. writing laboratory reports?	5	4	3	2	1

h. executing some models and instructional aids? 5 4 3 2 1

i. applying Physics' laws in solving questions and exercises? 5 4 3 2 1

D. Biology

20. Biology at the Secondary Level consists of several related units that form a group of basic concepts. To what degree do you feel you have understood these concepts, and are able to comprehend and discuss the following topics on organisms and environment:

a. biology and its realm? 5 4 3 2 1

b. the earth we live on? 5 4 3 2 1

c. evolution of life on the earth? 5 4 3 2 1

d. variation of living organisms? 5 4 3 2 1

e. different types environment and their suitability to life? 5 4 3 2 1

f. the cell: material, structure, function of its parts, activities? 5 4 3 2 1

g. distinction and specialities of cells? 5 4 3 2 1

h. processs, systems in living things:

1 - photosynthesis? 5 4 3 2 1

2 - digestion and digestive systems? 5 4 3 2 1

3 - transportation and circulatory systems? 5 4 3 2 1

4 - respiration and respiratory systems? 5 4 3 2 1

5- excretion and excratory systems? 5 4 3 2 1

6 - support and skeletal systems? 5 4 3 2 1

7 - movement and muscular systems? 5 4 3 2 1

8 - coherence and organization in the living things? 5 4 3 2 1

9 - repreoductive systems and the process of reproduction and growth? 5 4 3 2 1

10- Homeostasis systems? 5 4 3 2 1

j. heredity and its laws - the chromosones, genes, and characteristics? 5 4 3 2 1

k. concepts related to ecology:

1 - major ecological factors? 5 4 3 2 1

2 - cycle of matters and energy flow? 5 4 3 2 1

3 - nutritional chain and its network? 5 4 3 2 1

21. Biology Curriculum at the Secondary Level contains units of exercises, laboratory experiments, and activities that aim at student's acquisition of certain skills and emphasizes concepts included in the units. To what degree do you believe that you have gained the following skills as a result of performing these practical activities:

a. collection of sampels and field visits, that aim at :

1 - becoming acquainted with earth crust and affecting factors? 5 4 3 2 1

2 - becoming familiar with various types of rocks? 5 4 3 2 1

3 - becoming informed of various types of soil and studying their characteristics? 5 4 3 2 1

4 - becoming familiar with various types of plants and animals in the environment, and their classifications? 5 4 3 2 1

5 - studying differents parts of plant? 5 4 3 2 1

6 - studying the morphology of an insect, shell, plant, brain and eyes of a cow or a sheep? 5 4 3 2 1

b. dissection of some animals (a fish, a frog) in order to study their internal systems? 5 4 3 2 1

c. making slides and sections and the use of the microscope in :

1 - observing micro orgnaisms, identifying them, and their classification? 5 4 3 2 1

2 - examining different plant and animal cells and identifying and comparing them? 5 4 3 2 1

3 - examining different plant and animal tissues, identifying and comparing them? 5 4 3 2 1

4 - studying slides of : bacteria, protozoa, algae, fungi, bryophyta and tracheophyta? 5 4 3 2 1

d. performing laboratory experiments to study:

1 - dispersion and permeability? 5 4 3 2 1

2 - an anareobic respiration in yeast? 5 4 3 2 1

3 - factors affecting photosynthesis? 5 4 3 2 1

4 - decomposition and testing of starch, proteins, and fats,? 5 4 3 2 1

5 - coacervate and comparing to amoeba? 5 4 3 2 1

6 - root pressure and transport in plants? 5 4 3 2 1

7 - geotropism and phototropism in plants? 5 4 3 2 1

8 - effect of auxins rooting and plant growth? 5 4 3 2 1

9 - studying of the mechanism of muscular contraction by kimograph? 5 4 3 2 1

10- growing bacteria in petri dishes and the study of bacterial colonies? 5 4 3 2 1

E. Mathematics

Mathematics courses at the Secondary Level depend on related topics that support each other. Each of these topics has its own concepts, mathematical terminology, and generalizations, which develop the students skills in related fields.

22. To what extent have you comprehended the following concepts :

a. concepts of logic and methods of proof?	5	4	3	2	1
b. concepts of functions and correlations?	5	4	3	2	1
c. concepts of number systems you studied?	5	4	3	2	1
d. concepts of matrices and determinants?	5	4	3	2	1
e. concepts of exponents and logarthms?	5	4	3	2	1
f. concepts of regular numbers and the binomial theorem?	5	4	3	2	1
g. concepts of series and progressions?	5	4	3	2	1
h. concepts of mathematical systems?	5	4	3	2	1
i. concepts of complex numbers?	5	4	3	2	1
j. concepts of polynomial functions and rational functions?	5	4	3	2	1
k. concepts of trignometric functions?	5	4	3	2	1
l. concepts of solid geometry?	5	4	3	2	1
m. concepts of coordinate geometry and geometric transformations?	5	4	3	2	1
n. concepts of vectors?	5	4	3	2	1

o. concepts of conical sections? 5 4 3 2 1

p. concepts of statistics? 5 4 3 2 1

q. concepts of probability? 5 4 3 2 1

r. concepts of limits and continuity? 5 4 3 2 1

s. concepts of derivatives and differentiation? 5 4 3 2 1

t. concepts of integration? 5 4 3 2 1

23. To what degree have you acquired the following skills :

a. diagramming truth tables for compound statements? 5 4 3 2 1

b. finding the solution set of an open statement? 5 4 3 2 1

c. the resultant of two functions, and its graphical representation? 5 4 3 2 1

d. the inverse function of a progressive function? 5 4 3 2 1

e. transformation from one number system to another? 5 4 3 2 1

f. drawing flow charts? 5 4 3 2 1

g. finding the correspondent product of a matrix? 5 4 3 2 1

h. solving matrix equation? 5 4 3 2 1

i. use of normal logarithmic tables? 5 4 3 2 1

j. factorization using binomial theorem? 5 4 3 2 1

k. testing identities? 5 4 3 2 1

l. finding sum of numerical and geometrical series? 5 4 3 2 1

m. finding limits of some series? 5 4 3 2 1

n. applying these laws for solving mathematical problems and life situations? 5 4 3 2 1

o. performing the four operations - addition, subtraction, multiplication, and division for complex numbers? 5 4 3 2 1

p. finding application forms of complex numbers? 5 4 3 2 1

q. finding n^{th} root for the integer number (1)? 5 4 3 2 1

r. factorization of polynomials? 5 4 3 2 1

s. drawing double angle between two planes? 5 4 3 2 1

t. projection of a point and a line on a plane? 5 4 3 2 1

u. graphical representation of trigonometric functions? (sine, cosine, tangent)? 5 4 3 2 1

v. proving trigonomietric identities? 5 4 3 2 1

w. general solution of triangle? 5 4 3 2 1

x. finding equation of a straight line given satisfactory conditions? 5 4 3 2 1

y. finding the equation of a circle using given conditions? 5 4 3 2 1

z. finding vector equation of a stright line? 5 4 3 2 1

aa. finding the equations of a parabola, hyperbola and ellipse, and drawing them? 5 4 3 2 1

bb. using natural distribution curves? 5 4 3 2 1

cc. measuring central tendency and variation? 5 4 3 2 1

dd. drawing distribution table and degradation? 5 4 3 2 1

ee. finding spearman's and pearson's correlation coefficients? 5 4 3 2 1

ff. computations on binomial random variable and prediction? 5 4 3 2 1

gg. performing some laboratory experiments on probability and recording the results? 5 4 3 2 1

hh. distinguishing test of a sample by restoration and non-restoration? 5 4 3 2 1

ii. finding first derivative from basic principles? 5 4 3 2 1

jj. finding derivatives of algebraic and trigonometric functions? 5 4 3 2 1

kk. finding derevatives of explicit function? 5 4 3 2 1

ll. finding derivatives of implicit and complex functions? 5 4 3 2 1

mm. solving problems of physics and geometry by use of derivatives? 5 4 3 2 1

nn. use of first and second derivatives to find rates of increase and decrease, maxima and minima? 5 4 3 2 1

oo. drawing curves? 5 4 3 2 1

pp. integration of polynomial functions? 5 4 3 2 1

qq. using methods of integration (parts and fractions)? 5 4 3 2 1

rr. calculation of areas and volumes? 5 4 3 2 1

F. Arabic Language

24. As you have studied grammar and inference topics :

a. To what extent did you acquire grammatical skills? 5 4 3 2 1

b. To what extent did you acquire language habits? 5 4 3 2 1

25. As you have studied critique and eloquence topics :

a. To what extent was your interest for reading in critique and eloquence excited? 5 4 3 2 1

b. To what extent was your literary appreciation sense developed? 5 4 3 2 1

26. As you have studied reading topics :

a. To what extent did they contribute to your grammar and thought resources? 5 4 3 2 1

b. To what extent did they contribute to your acquisition of technical and practical styles and attitudes? 5 4 3 2 1

27. As you have studied Literary Text topics:

a. To what extent did they contribute to your developing literary appreciation? 5 4 3 2 1

b. To what extent did they help you make sound literary judgements on your readings ? 5 4 3 2 1

c. To what extent did they help you achieve the skill of criticism? 5 4 3 2 1

d. To what extent do you depend on yourself in analyzing some literary texts? 5 4 3 2 1

C: Islamic Education

28. To what extent are the practical performances of Islamic Liturgy :

a. an integrated part in Islamic Education? 5 4 3 2 1

b. a basic part in method of teaching of Islamic Education? 5 4 3 2 1

29. The six aspects of the Islamic Education curriculum are :
The Quran, The Hadith, Belief (A'keedah) Worship, The Prophet's Biography, and Islamic Systems.
To what degree do you feel that some degree of continuity and integration was realized among these aspects as a result of the way the curriculum treated these aspects? 5 4 3 2 1

30. To what extent does the Islamic Education subject matter emphasize the historical aspects of Islam? 5 4 3 2 1

31. To what extent does the Islamic Education subject-matter help you develop basic attitudes and skills of logical thinking namely :

    a. deductive thinking : application of general principles on special cases? 5 4 3 2 1

    b. inductive thinking : arriving at a general principle or rule from special cases? 5 4 3 2 1

32. To what extent do the Islamic Education Subject-matter encourage you to read extra-curricularly Islamic reference and major books? 5 4 3 2 1

33. The Islamic Education Curriculum for Secondary Level is constituted as six separate lessons corresponding to six aspects of Islamic Education. To what degree do you see the separate lesson method as actualizing the intended integration of these aspects? 5 4 3 2 1

34. The Islamic Education Curriculum aims at achieving at the Secondary Levels certain objectives. To what extent were the following objectives realized:

    a. completing the building of an integrated Islamic personality by considering all developmental domains namely: physical spiritual, cognitive and behaviour? 5 4 3 2 1

    b. developing and stabilizing loyalty to GOD, belonging to the Islamic nation, and pride in Islam as belief and as system of life? 5 4 3 2 1

    c. reinforcing behaviour based on commitment to Islamic teachings and refuting non-Islamic principles and teachings for individual and group behavior? 5 4 3 2 1

    d. developing positive attitudes based on Islamic teachings that will help a Muslim confront contemporary challenges? 5 4 3 2 1

    e. identify Islamic systems that warns against disadvantages of man-made systems so as to be able to confront challenges of non-Islamic intellectual and cultural invasion to which a Muslim may be exposed to in contemporary life? 5 4 3 2 1

H. Contemporary Issues

35. Contemporary Issues Course contains a group of current problems trasmitted to us by the mass media and issues. To what extent have you understood these problems and their social, local, national, and international effects:

a. cultural selectionism?	5	4	3	2	1
b. economic inflation?	5	4	3	2	1
c. economic regression?	5	4	3	2	1
d. immigration?	5	4	3	2	1
e. problems of development?	5	4	3	2	1
f. desert and sahara creeping?	5	4	3	2	1
g. depletion of natural resources?	5	4	3	2	1
h. nutritional security?	5	4	3	2	1
i. transporation?	5	4	3	2	1
j. disposal of waste products?	5	4	3	2	1
k. soil problems?	5	4	3	2	1

36. To what degree do you feel that studying these problems contributed to formation of positive attitudes in such a way that will help you contribute to reducing their dangers and their effects at local, national and international levels? 5 4 3 2 1

I. English

37. To what extent do you feel that the English Language curriculum realized the following objectives :

a. enriched your knowledge about the outside world?	5	4	3	2	1
b. provided you with basic English language skills that enable you to express yourself in written and oral English with foreign nationals in and outside Oman?	5	4	3	2	1

c. enabled you to use English effectively and creatively in both casual and formal situations? 5 4 3 2 1

d. encouraged you to read books, journals and magazines in English outside the curriculum? 5 4 3 2 1

38. To what extent does the English language curriculum content provide you with exercises and drills enabling you to master the folloiwng basic skills :

a. listening? 5 4 3 2 1

b. speaking? 5 4 3 2 1

c. reading? 5 4 3 2 1

d. writing? 5 4 3 2 1

e. comprehension? 5 4 3 2 1

39. To what extent does the English Language curriculum emphasize the following :

a. silent reading speed and comprehension? 5 4 3 2 1

b. reading aloud with fluency and precise pronunciation? 5 4 3 2 1

40. To what extent were English language cassettes useful to you in regard to :

a. providing good pronunciation model? 5 4 3 2 1

b. promoting and practicing listening comprehension? 5 4 3 2 1

c. presenting difficult materials such as dialogs and songs? 5 4 3 2 1

41. To what extent were the "Reading for Information Texts" useful to you in regard to:

a. simulating essays and stories from newspapers or magazines? 5 4 3 2 1

b. encouraging your rapid silent reading of quite difficult texts in order to extract the main points and factual information? 5 4 3 2 1

42. To what extent was the English Language curriculum successful in enabling you to master the following functional skills:

a. feeling at ease with the English language so you could give simple instructions and directions in a sequential manner? 5 4 3 2 1

b. understand the link of events in the past and accept and acknowledge social invitations in the appropriate tone and form? 5 4 3 2 1

c. use proper forms of greeting and congratulatory statements? 5 4 3 2 1

d. describe personal features of people? 5 4 3 2 1

43. To what degree does the English Language curriculum content cover specialized vocabulary from the linguistics point of view which would enable you to continue studies at the university level and be able to communicate in respect to :

a. the personal domain? 5 4 3 2 1

b. the social domain? 5 4 3 2 1

c. the national domain? 5 4 3 2 1

d. the international domain? 5 4 3 2 1

e. the scientific domain? 5 4 3 2 1

f. the literary and cultural domain? 5 4 3 2 1

g. the geo-political domain? 5 4 3 2 1

44. To what extent does the English Language Curriculum encourage you to think creatively and independently? 5 4 3 2 1

SECTION II
METHODS OF TEACHING

1.	To what degree do you see that the teacher relates subject matter to life situations and practical excercises?	5	4	3	2	1
2.	To what extent does the teacher employ a variety approaches appropriate to the nature of the subject matter?	5	4	3	2	1
3.	To what degree do you feel the teacher employs several methods of teaching appropriate to different students' abilities including the high achievers, average and weak achievesrs?	5	4	3	2	1
4.	To what extent does the teacher encourage independent learning approach, e.g. students performance of researches, studies and experiments by themselves?	5	4	3	2	1
5.	To what extent does the teacher employ project or team approach when conducting lessons?	5	4	3	2	1
6.	To what extent does the teacher employ different instructional media in lesson demonstration?	5	4	3	2	1
7.	To what extent does the teacher's approaches encourage teacher-pupil interaction and allow students' to express opinions?	5	4	3	2	1
8.	From your point-of-view, what degree of integration exists between textbook contents and the teacher's class activities?	5	4	3	2	1
9.	To what extent do methods of teaching at the Secondary level help you develop the following critical thinking habits and attitudes :					
	a. suspending judgement?	5	4	3	2	1
	b. investigate accuracy of data?	5	4	3	2	1
	c. evaluating data resources?	5	4	3	2	1
	d. employing a variety of information resources?	5	4	3	2	1

SECTION III
MATERIAL FACILITIES

1.	To what degree do you feel that your Secondary School is an educational environment for the students cognitive development?	5	4	3	2	1
2.	What is your judgement of classroom facilities from the following perspectives: space, furniture, lighting, ventilation, equipment and apparatus?	5	4	3	2	1
3.	To what extent was school laboratory useful in the following aspects:					
	a. ensuring the comprehension of theoretical-concepts you have already studied?	5	4	3	2	1
	b. acquisition skillful use and manipulation of laboratory apparatus and materials?	5	4	3	2	1
	c. schematizing results, drawing graphs, and writing lab-reports?	5	4	3	2	1
4.	To what extent was school library useful in the following aspects:					
	a. identify library reference system and fast location of required references?	5	4	3	2	1
	b. reading references related to subject-matter?	5	4	3	2	1
	c. general reading and general culture?	5	4	3	2	1
5.	To what degree do you feel that instructional media available at your school is adequate and appropriate for the Secondary Level subject-matters?	5	4	3	2	1
6.	To what extent are the following places and facilities related to different activities sufficient and appropriate :					
	a. clubs?	5	4	3	2	1
	b. fairs?	5	4	3	2	1
	c. sport stadiums?	5	4	3	2	1
	d. theatres?	5	4	3	2	1
	e. mosque?	5	4	3	2	1

SECTION IV
EVALUATION

1. Evaluation process at the Secondary Level often includes several tests. To what degree do you feel the following tests are appropriate for the Secondary level student:

   a. objective-question tests: true-false, completion, multiple-choice? 5 4 3 2 1

   b. subjective tests: student is asked to answer in detail? 5 4 3 2 1

   c. performance tests: laboratory experiments? 5 4 3 2 1

2. To what degree do you see that the tests you had at the Secondary level measure the following :

   a. retention of facts? 5 4 3 2 1

   b. understanding? 5 4 3 2 1

   c. ability to analyze? 5 4 3 2 1

   d. ability to apply? 5 4 3 2 1

   e. problem-solving? 5 4 3 2 1

3. To what extent did the teacher depend on :

   a. lesson stage tests? 5 4 3 2 1

   b. monthly periodic tests? 5 4 3 2 1

   c. final tests? 5 4 3 2 1

SULTANATE OF OMAN
MINISTRY OF EDUCATION & YOUTH
PROJECT: OMANI CURRICULUM EVALUATION

SECONDARY LEVEL

STUDENT QUESTIONNAIRE : TEXTBOOK

1987-1988

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IN THE NAME OF ALLAH THE BENEFICIENT THE MERCIFUL

Sultanate of Oman
Ministry of Education & Youth
Project: Omani Curriculum Evaluation

Evaluation of Secondary Level Textbooks

The Ministry of Education & Youth is presently engaged in a project to evaluate Omani curriculum at the three levels of general education.

The textbook represents an important element in the educational process. Students depend on it for academic achievement. This questionnaire is designed to be answered by students of the three grades at the Secondary Level, for the purpose of collecting data and information necessary for the study. The study sample was secondary level students randomly selected.

Students are asked to respond to the questionnaire prepared in accordance with the objectives of the Omani Curriculum for Secondary Level. So that textbook evaluation results are valid, the students are requested to answer honestly, frankly, and freely. All data and information gathered will be treated confidentially and used only for purpose of the study.

Due gratitude is offered to the respondents, and it is hoped that the results of the study will benefit (advance) textbook and curriculum development and provide for improved methods of instruction achievement of objectives.

PART I: GENERAL DATA

Below are several statements; please write or put the mark (X) on the statement that represent your case :

1. Sex ---- Male ---- Female

2. Nationality ---- Omani ---- Non-Omani

3. Educational District in which you study your Secondary Level:

---- Muscat
---- Al-Batinah
---- Al-Roustaq
---- Al-Dhakhaliyah
---- Al-Sharqiyah
---- Al-Wousta
---- Al-Dhahirah
---- Al-Janoubiyah
---- Musandam

4. School Grade:

PART II: QUESTIONNAIRE ELEMENTS

Introduction: The textbook is considered one of the most important elements of the educational process and is often depended upon by students for their academic achievements.

A group of questions and statements that evaluate, in various degrees, Secondary Level textbooks are listed below. Please react to each question or statement indicating your judgement as to the book's effectiveness in realizing objectives in accordance with following criteria::

Fully.....(91% or more).....5
To a great extent....(61% to 90%).....4
Sometimes.....(31% to 60%).....3
Seldom.....(1% to 30%).....2
Rarely.....(less than 1%).....1

For example, if your judgement on an item concerning any book is "realized highly, or is highly effective", you should circle number (5) to the right of the item. However, if your judgement on the item's realization is "below average", then you should circle number (2).

Please answer every item by selecting and circling the number that best represents your opinion.

First : Common Subject Matters

Islamic Education

1. You have studied the course Islamic Education for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:

   a. To what extent have you been able to cope with the material presented in the textbook? 5 4 3 2 1

   b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades? 5 4 3 2 1

   c. To what extent does the material presented in the book relate to other subjects you have studied? 5 4 3 2 1

d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Arabic Language

2. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Reading and Texts:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Arabic Language

3. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Linguistic Applications (Grammar and Inference):

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Arabic Language

4. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Linguistic Applications (Literary Criticism, Rhetoric, and Prosody):

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
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g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

English Language

5. You have studied the course English Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, New Age Secondary:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

English Language

6. You have studied the course English Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, S. Book and Work Book:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Second : Subject Matter Literary Section

Histrory of Arabic Literature

1. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, History of Arabic Literature:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Social Studies

2. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Regional Geography:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Social Studies

3. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, History of Oman and the Arab Gulf:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

4. You have studied the course Civic Education for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

5. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Human Sagacity (Culture):

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

General Science

6. You have studied the course General Science for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, General Science:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Mathematics

7. You have studied the course Mathematics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Mathematics for Grade 3 Secondary (Literary Section):

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Third : Subject Matter Science Section

Chemistry

1. You have studied the course of Chemistry for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Physics

2. You have studied the course of Physics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Biology

3. You have studied the course of Biology for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Biology:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Mathematics

4. You have studied the course of Mathematics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Mathematics for Grade 3 Secondary Science:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

5. You have studied the course of Integration, probability and statistics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

Contemporary Problems

6. You have studied the course of Contemporary Problems for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook of Contemporary Problems:

a. To what extent have you been able to cope with the material presented in the textbook?	5	4	3	2	1
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	5	4	3	2	1
c. To what extent does the material presented in the book relate to other subjects you have studied?	5	4	3	2	1
d. To what extent does the book show organization and clear presentation of information?	5	4	3	2	1
e. To what extent does the book show clarity and gradation of concepts presented?	5	4	3	2	1
f. To what extent is the book current in information and data presented?	5	4	3	2	1
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	5	4	3	2	1
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5	4	3	2	1
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	5	4	3	2	1
j. To what extent does the book encourage the use of various instructional media?	5	4	3	2	1
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	5	4	3	2	1
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5	4	3	2	1

GRADUATES QUESTIONNAIRE

Sultanate of Oman
Ministry of Education and Youth
Project: Omani Curriculum Evaluation

The Ministry of Education and Youth is presently engaged in a project to evaluate Omani Curriculum at the three levels of general education.

This questionnaire was designed for both graduates who are continuing in higher education studies and graduates who elected to enter the work force. In order to collect information, a random sample was selected from secondary school graduates.

Students were asked to respond to the questionnaire prepared in accordance with the objectives of the Omani Curriculum for Secondary Level. So that the evaluation results are valid, the students are requested to answer honestly, frankly, and freely. All data and information gathered will be treated confidentially and used only for the purposes of the study.

Due gratitude is offered to the respondents, and it is hoped that the results of the study will help the Ministry of Education in the continuous development of secondary school curriculum and will provide for improved methods of implementation.

GRADUATES
PART I: GENERAL DATA

Please place an (X) in front of the statement which represents your situation.

1. Sex ---- Male ---- Female

2. Nationality ---- Omani ---- Non-Omani

3. Educational District from which you graduated secondary school:

   ---- Muscat
   ---- Al-Batinah
   ---- Al-Roustaq
   ---- Al-Dhakhaliyah
   ---- Al-Sharqiyah
   ---- Al-Wousta
   ---- Al-Dhahirah
   ---- Al-Janoubiyah
   ---- Musandam

4. Year in which you took the General Secondary School Examination:

   ---- 1987
   ---- 1986
   ---- 1985
   ---- 1984
   ---- 1983

5. The college or institute in which you are presently enrolled:

---- College of Education and Islamic Science

---- College of Science

---- College of Medicine

---- College of Engineering

---- College of Agriculture

---- Junior College for Teachers

---- Omani Technical Junior College

---- Other institutions

6. Your present occupation:

---- Clerical Work

---- Engineering or Technical Work

---- Administration

---- Financial Affairs

---- Other (please specify)

PART II : GENERAL INSTRUCTIONS

This questionnaire is divided to five sections. Section I contains items on the curricula and subject matters you studied at the secondary level. Section II concerns methods of teaching that were used or applied during your study. The third section contains items about the physical environment of the school. Section IV concerns the methods of evaluation and Section V contains items about textbooks used in the courses you studied.

Each section consists of a set of questions or statements which describe elements above. These questionnaire items do not apply to a particular grade or subject-matter but are general statements which aplly to knowledge, skills, attitudes, and methods that you acquired during secondary school studies.

Please respond to each statement or question according to the following scale:

Strongly.....(91% or more).....5
Agree.....(61% to 90%).....4
Sometimes.agree.....(31% to 60%).....3
Disagree.....(1% to 30%).....2
Strongly disagree.....(less than 1%).....1

For example if you strongly agree with a statement, you would circle number (5) on the scale next to the statement. However, if you disagree with the item, you would circle number (2). Respond to each statement as best you can.

Section I

Curriculum and Subject-Matters

Circle the number (only one) which reflects your evaluation of the statement.

1. To what degree do you feel that the subject-matters you studied at the secondary level formed integrated and interrelated body of knowledge?	5	4	3	2	1
2. From your point of view, did these subject-matters treat the local environment in such a way that you understand the needs of environment conseervation and preservation and methods of meeting these needs?	5	4	3	2	1
3. To what extent do you believe that the subject-matters helped you acquire the following basic skills :					
a. cognitive skills?	5	4	3	2	1
b. social skills?	5	4	3	2	1
c. psycho-motor skills?	5	4	3	2	1
4. To what degree do you feel that the curriculum helped you to understand the scientific and technical developments of the presentage?	5	4	3	2	1
5. To what extent do your believe that your studies at the secondary level helped you to discover, develop, and refine your talents?	5	4	3	2	1
6. To what extent do you agree the subject-matters you learned at the secondary level assisted you in your higher education studies?	5	4	3	2	1
7. To what extent do you agree that the subjects you studied at the secondary level contributed to preparing you for your present occupation?	5	4	3	2	1

8. To what degree do you believe that these subjects reflected a balance between concepts, skills, social aspects, attitudes, and values? 5 4 3 2 1

9. To what degree do you feel that teaching methods of these subject-matters helped and guided you to acquire a scientific approach to solving a problems as well as recognization of basic operations of deduction and induction? 5 4 3 2 1

10. To what extent do you agree that your studies contributed to the development of reading habits which motivated you to study a topic in depth through use of references and research materials? 5 4 3 2 1

11. To what extent do you agree that your studies at the secondary level developed your ability to discuss, appreciate, make judgements, and disagree with readings? 5 4 3 2 1

12. To what degree do you feel that your high school studies contributed to your development of self-respect and loyalty to country and to the Arab world? 5 4 3 2 1

13. To what extent did your secondary level studies develop a positive attitude toward the utilization and conservation of natural resources? 5 4 3 2 1

14. To what degree do you feel that these studies developed cooperation in group work and a respect for the opinior of others? 5 4 3 2 1

15. To what degree do you agree that secondary level studies encouraged you to participate in extra-curricular activities and developed your artistic, literary, scientific, and technological talents? 5 4 3 2 1

16. To what degree do you feel that the level of the subject-matters was suitable to each grade level? 5 4 3 2 1

SECTION II
METHODS OF TEACHING

1. To what degree do you feel that the teachers inter-related the subject-matters with life situations and practical experiences?	5	4	3	2	1
2. To what extent do you feel that the teachers used different methods and techniques appropriate to the nature of the subject-matters?	5	4	3	2	1
3. To what degree do you feel that the teachers at the secondary level used several teaching methods suitable to different ability levels of the students? (High, average, and low achievers)	5	4	3	2	1
4. To what extent do you agree that the method of teaching facilitated teacher-pupil interaction and allowed students the opportunity to express opinions?	5	4	3	2	1
5. To what extent do you agree that teachers used projects and team approach in teaching subject-matter at the secondary level?	5	4	3	2	1
6. To what degree do you feel that teachers utilized different instructional media (materials) in lesson?	5	4	3	2	1
7. To what degree do you feel that teachers encouraged self-learning methods of research and experimentation through independent study?	5	4	3	2	1
8. From your point of view, to what degree was there interaction between teaching activities and textbook content?	5	4	3	2	1

9. To what extent do you agree that the teaching methods of various subject-matter at the secondary level helped develop the following habits and attitudes critical thinking:

a. suspending judgement?	5	4	3	2	1
b. accuracy of information?	5	4	3	2	1
c. evaluation of data resources?	5	4	3	2	1
d. utilization of references and resources?	5	4	3	2	1

SECTION III
PHYSICAL FACILITIES

1. To what extent did the educational environment of the secondary school you attended encourage the cognitive development of the students?	5	4	3	2	1
2. To what extent do you believe that the classroom size, furniture, lighting, ventilation were suitable for the various subject-matters?	5	4	3	2	1
3. To what extent do you agree that you benefited from laboratory experiments in the following ways:					
a. emphasis on comprehension of concepts?	5	4	3	2	1
b. skills of apparatus and equipment use?	5	4	3	2	1
c. utilization of graphs, charts and tables in report writing of experimental results?	5	4	3	2	1

SECTION IV
EVALUATION

1. The process of evaluation at the secondary level consists of various examinations. To what entent do you feel that the following types of examinations are suitable for the secondary level:

   a. exams consisting of objective test items? (True-False,statement completion, multiple choice) 5 4 3 2 1

   b. Essay tests? (expression of opinion or personal idea on a specific topic; discussion of an issues with supporting examples) 5 4 3 2 1

   c. Performance tests? (laboratory experiments) 5 4 3 2 1

2. To what degree do you believe that tests you took during secondary school measured the following:

   a. review of facts? 5 4 3 2 1

   b. comprehension? 5 4 3 2 1

   c. ability to analyze? 5 4 3 2 1

   d. ability to apply? 5 4 3 2 1

   e. problem solving? 5 4 3 2 1

3. To what extent do you feel that the teacher depended on:

   a. formative evaluation? 5 4 3 2 1

   b. monthly evaluation? 5 4 3 2 1

   c. summative evaluation? 5 4 3 2 1

4. To what degree do you believe that you benefited from the school library in the following regard:

   a. method of cataloging which allowed quick referencing? 5 4 3 2 1

   b. availability of reference material related to subject-matter? 5 4 3 2 1

   c. availability of general reference materials and cultural resources? 5 4 3 2 1

5. To what extent do you agree that adequate instructional media were available and suitable for subject-matters at the secondary level? 5 4 3 2 1

6. To what degree do you feel that the physical facilities for extra-curricular activities were suitable and sufficient for:

   a. clubs? 5 4 3 2 1

   b. exhibitions? 5 4 3 2 1

   c. sports? 5 4 3 2 1

   d. stage? 5 4 3 2 1

   e. mosque? 5 4 3 2 1

PART V:
TEXTBOOK

1. To what extent do you believe that the textbooks at the secondary level emphasized the following:

a. suitability of book in relation to intellectual level of student?	5	4	3	2	1
b. sequencing of material in relation to content of books in previous grades?	5	4	3	2	1
c. organization of content of book and fluency of presentation?	5	4	3	2	1
d. clarity of concepts and progression from simple to more complex?	5	4	3	2	1
e. up to date information and knowledge?	5	4	3	2	1
f. sufficiency and differentiation of examples and suitability for grade level?	5	4	3	2	1
g. sufficiency and differentiation of exercise and problems and suitability for grade level?	5	4	3	2	1
h. effectiveness of activities and practical applications?	5	4	3	2	1
i. encouragement of utlization of various instructional materials and activities?	5	4	3	2	1
j. suitability of textbook in relation to the size and quality of printing?	5	4	3	2	1
k. clarity of figures, tables, maps, and pictures in relation to content of subject?	5	4	3	2	1

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Part I Section A
General and Demographic Information
(Teacher)

Item IA		Subject Taught					
		Islamic Education	Arabic Language	English Language	Math	General Science	History
1. Sex?							
Male:	%	53.4	57.3	54.7	63.4	61.3	66.2
Female:	%	46.6	42.7	45.3	36.6	38.7	33.8
2. Nationality?							
Omani:	%	20.5	14.5	10.3	5.4	6.5	6.2
Non-Omani:	%	79.5	85.5	88.9	93.8	93.5	93.8
3. Name of your school district?							
Muscat:	%	17.0	12.0	12.0	13.4	9.7	18.5
Batinah:	%	17.0	12.8	12.8	13.4	9.7	18.5
Roustaq:	%	11.4	12.8	12.8	13.4	16.1	12.3
Dakhiliyah:	%	11.4	12.8	12.8	11.6	16.1	13.8
Sharqiyah:	%	9.1	10.3	12.0	10.7	6.5	7.7
Wousta:	%	6.8	7.7	6.8	9.8	9.7	6.2
Dhahirah:	%	11.4	12.8	12.8	12.5	16.1	9.2
Janoubiyah:	%	11.4	12.8	12.0	11.6	12.9	10.8
Musandam:	%	4.5	6.0	6.0	3.6	3.2	3.1

Part I Section A
General and Demographic Information
(Teacher)

Item IA		Subject Taught					
		Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
1. Sex?							
Male:	%	59.5	60.0	58.2	70.2	57.4	72.7
Female:	%	40.5	40.0	41.8	29.8	42.6	27.3
2. Nationality?							
Omani:	%	12.2	10.0	7.3	1.8	7.4	9.1
Non-Omani:	%	87.8	90.0	92.7	98.2	90.7	90.9
3. Name of your school district?							
Muscat:	%	16.2	17.5	18.2	17.5	16.7	12.1
Batinah:	%	16.2	12.5	18.2	17.5	18.5	15.2
Roustaq:	%	12.2	7.5	12.7	12.3	9.3	15.2
Dakhiliyah:	%	16.2	10.0	10.9	14.0	16.7	15.2
Sharqiyan:	%	5.4	10.0	10.9	7.0	7.4	9.1
Wousta:	%	6.8	12.5	9.1	7.0	5.6	6.1
Dhahirah:	%	9.5	10.0	7.3	10.5	13.0	12.1
Janoubiyah:	%	10.8	12.5	10.9	12.3	11.1	12.1
Musandam:	%	6.8	7.5	1.8	1.8	1.9	3.0

Item IA	Subject Taught					
	Islamic Education	Arabic Language	English Language	Math	General Science	History
4. How many students do you teach?						
Less than 25: %	26.1	35.0	29.9	37.5	38.7	33.8
From 25 to 35: %	45.5	50.4	52.1	43.8	54.8	55.4
Greater than 35: %	28.4	14.5	17.9	18.8	6.5	10.8
5. How many years have you taught?						
From one to three years: %	19.3	11.1	11.1	10.7	6.5	4.6
From four to six years: %	20.5	11.1	13.7	8.0	12.9	3.1
From seven to ten years: %	9.1	17.9	14.5	28.6	19.4	4.6
More than ten years: %	51.1	59.8	60.7	52.7	61.3	87.7
6. How many years have you been a teacher in Oman?						
From one to three years: %	64.8	62.4	39.3	58.0	67.7	61.5
From four to six years: %	15.9	15.4	35.9	28.6	16.1	26.2
From seven to ten years: %	3.4	12.0	20.5	6.3	9.7	7.7
More than ten years: %	15.9	10.3	4.3	7.1	6.5	4.6
7. What is your educational preparation?						
College or University degree (in Education): %	33.0	41.0	36.8	82.1	77.4	58.5
College or University degree (in other than College of Education): %	47.7	47.0	15.4	11.6	22.6	33.8

Item IA	Subject Taught					
	Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
4. How many students do you teach?						
Less than 25: %	33.8	47.5	27.3	29.8	31.5	42.4
From 25 to 35: %	41.9	47.5	54.5	57.9	44.4	54.5
Greater than 35: %	24.3	5.0	18.2	12.3	24.1	3.0
5. How many years have you taught?						
From one to three years: %	5.4	10.0	7.3	3.5	13.0	9.1
From four to six years: %	14.9	15.0	10.9	7.0	7.4	12.1
From seven to ten years: %	17.6	10.0	25.5	26.3	14.8	6.1
More than ten years: %	62.2	65.0	56.4	63.2	64.8	72.7
6. How many years have you been a teacher in Oman?						
From one to three years: %	63.5	55.0	61.8	82.5	55.6	72.7
From four to six years: %	25.7	22.5	25.5	8.8	18.5	21.2
From seven to ten years: %	9.5	12.5	9.1	8.8	11.1	0.0
More than ten years: %	1.4	10.0	3.6	0.0	14.8	6.1
7. What is your educational preparation?						
College or University degree (in Education): %	63.5	47.5	49.1	89.5	64.8	57.6
College or University degree (in other than College of Education): %	32.4	32.5	45.5	1.8	25.9	30.3

Item IA	Subject Taught					
	Islamic Education	Arabic Language	English Language	Math	General Science	History
7. What is your educational preparation? (con't)						
Teacher Training Institute (2 years after Secondary School) %	1.1	0.0	21.4	0.9	0.0	0.0
Teacher Training Institute (1 year after secondary School): %	8.0	0.9	2.6	0.0	0.0	0.0
Teacher Training Institute (5 years after Preparatory School): %	6.8	4.3	0.9	0.9	0.0	0.0
Teacher Training Institute (3 years after Preparatory School) %	3.4	6.0	23.1	4.5	0.0	7.7
8. What was the length of In-Service training you received in the subject matter(s) you teach?						
None: %	20.5	12.0	9.4	10.7	22.6	7.7
Less than one month: %	43.2	59.8	10.8	50.9	54.8	63.1
One to three months: %	4.5	11.1	20.5	10.7	12.9	7.7
Four to six months: %	1.1	1.7	6.8	1.8	3.2	3.1
Seven to twelve months: %	2.3	3.4	6.8	3.6	0.0	3.1
One to two years: %	20.4	11.1	37.6	14.3	6.5	15.4
9. Where did you receive this In-Service training?						
In Oman: %	31.8	32.5	25.6	21.4	29.0	15.4
Outside Oman: %	68.2	67.5	74.4	78.6	71.0	84.6

Item IA		Subject Taught					
		Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
7. What is your educational preparation?							
Teacher Training Institute (2 years after Secondary School)	%	0.0	2.5	1.8	1.8	1.9	0.0
Teacher Training Institute (1 year after secondary School):	%	0.0	0.0	0.0	0.0	1.9	0.0
Teacher Training Institute (5 years after Preparatory School):	%	0.0	0.0	1.8	0.0	1.9	0.0
Teacher Training Institute (3 years after Preparatory School)	%	4.1	17.5	1.8	7.0	3.7	12.1
8. What was the length of In-Service training you received in the subject matter(s) you teach?							
None:	%	13.5	12.5	18.2	17.5	22.2	21.2
Less than one month:	%	62.2	62.5	49.1	59.6	48.1	63.6
One to three months:	%	9.5	7.5	14.5	7.0	11.1	9.1
Four to six months:	%	1.4	0.0	3.6	1.8	7.4	0.0
Seven to twelve months:	%	2.7	2.5	1.8	0.0	5.6	3.0
One to two years:	%	10.8	15.0	12.7	14.0	5.6	3.0
9. Where did you receive this In-Service training?							
In Oman:	%	14.9	27.5	16.4	19.3	27.8	24.2
Outside Oman:	%	85.1	72.5	83.6	80.7	72.2	75.8

Item IA		Subject Taught					
		Islamic Education	Arabic Language	English Language	Math	General Science	History
10. How many workshops have you attended concerning the implementation of the Omani curriculum?							
None:	%	47.7	14.5	17.9	10.7	6.5	21.5
One workshop:	%	28.4	23.1	4.3	17.9	22.6	35.4
Two workshops:	%	8.0	24.8	4.8	25.9	35.5	20.0
Three workshops:	%	8.0	19.7	7.7	20.5	12.9	13.8
More than three workshops:	%	8.0	17.9	63.2	25.0	22.6	9.2

Item IA		Subject Taught					
		Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
10. How many workshops have you attended concerning the implementation of the Omani curriculum?							
None:	%	23.0	32.5	23.6	22.8	14.8	33.3
One workshop:	%	20.3	17.5	16.4	15.8	16.7	24.2
Two workshops:	%	17.6	15.0	30.9	33.3	25.9	18.2
Three workshops:	%	18.9	20.0	9.1	14.0	20.4	15.2
More than three workshops:	%	20.3	15.0	20.0	14.0	22.2	9.1

Part I Section A
General and Demographic Information
(Supervisor)

Item IA		Subject Taught					
		Islamic Education	Arabic Language	English Language	Math	General Sciences	History
1. Sex?							
Male:	%	100.0	93.8	84.2	88.9	100.0	100.0
Female:	%	0.0	6.3	15.8	11.1	0.0	0.0
2. Nationality?							
Omani:	%	16.7	6.3	10.5	0.0	0.0	12.5
Non-Omani:	%	83.3	93.8	84.2	100.0	100.0	87.5
3. Name of your school district?							
Muscat:	%	8.3	18.8	15.8	0.0	16.7	12.5
Batinah:	%	8.3	12.5	15.8	22.2	16.7	12.5
Roustaq:	%	8.3	6.3	10.5	11.1	16.7	12.5
Dakhiliyah:	%	8.3	12.5	15.8	11.1	0.0	12.5
Sharqiyah:	%	16.7	12.5	10.5	11.1	16.7	12.5
Wousta:	%	16.7	12.5	5.3	11.1	0.0	12.5
Dhahirah:	%	8.3	6.3	10.5	11.1	16.7	12.5
Janoubiyah:	%	16.7	12.5	10.5	11.1	16.7	12.5
Musandam:	%	8.3	6.3	5.3	11.1	0.0	0.0

Part I Section A
General and Demographic Information
(Supervisor)

Item IA		Subject Taught					
		Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
1. Sex?							
Male:	%	100.0	66.7	83.3	100.0	100.0	66.7
Female:	%	0.0	33.3	16.7	0.0	0.0	33.3
2. Nationality?							
Omani:	%	0.0	33.3	0.0	0.0	0.0	33.3
Non-Omani:	%	100.0	66.7	100.0	100.0	100.0	66.7
3. Name of your school district?							
Muscat:	%	14.3	16.7	16.7	33.3	0.0	33.3
Batinah:	%	14.3	16.7	16.7	33.3	25.0	0.0
Roustaq:	%	14.3	0.0	0.0	0.0	0.0	0.0
Dakhiliyah:	%	14.3	16.7	16.7	0.0	25.0	0.0
Sharqiyan:	%	14.3	16.7	0.0	0.0	0.0	0.0
Wousta:	%	14.3	16.7	16.7	0.0	25.0	33.3
Dhahirah:	%	0.0	0.0	16.7	0.0	0.0	0.0
Janoubiyah:	%	14.3	16.7	16.7	33.3	25.0	33.3
Musandam:	%	0.0	0.0	0.0	0.0	0.0	0.0

Item IA		Subject Taught					
		Islamic Education	Arabic Language	English Language	Math	General Sciences	History
4. How many teachers do you supervise?							
Less than 25:	%	25.0	25.0	21.1	0.0	33.3	0.0
From 21 to 50:	%	8.3	18.8	21.1	33.3	50.0	37.5
From 51 to 100:	%	66.7	56.3	57.9	66.7	16.7	62.5
5. How many years have you taught and supervised?							
From one to three years:	%	75.0	75.0	0.0	66.7	66.7	62.5
From four to six years:	%	16.7	0.0	10.5	33.3	33.3	37.5
From seven to ten years:	%	8.3	0.0	0.0	0.0	0.0	0.0
More than ten years:	%	0.0	25.0	89.5	0.0	0.0	0.0
6. How many years have you been a supervisor in Oman?							
From one to three years:	%	91.7	75.0	57.9	100.0	66.7	100.0
From four to six years:	%	0.0	6.3	21.1	0.0	33.3	0.0
From seven to ten years:	%	8.3	0.0	15.8	0.0	0.0	0.0
More than ten years:	%	0.0	18.8	5.3	0.0	0.0	0.0
7. What is your educational preparation?							
College or University degree (in Education):	%	0.0	0.0	26.3	0.0	0.0	0.0
College or University degree (in other than College of Education):	%	0.0	6.3	21.1	0.0	16.7	0.0

Item IA		Subject Taught					
		Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
4. How many teachers do you supervisor?							
Less than 25:	%	0.0	16.7	0.0	0.0	25.0	33.3
From 21 to 50:	%	0.0	0.0	50.0	33.3	50.0	0.0
From 51 to 100:	%	100.0	83.3	50.0	66.7	25.0	66.7
5. How many years have you taught and supervised?							
From one to three years:	%	57.1	50.0	66.7	100.0	25.0	66.7
From four to six years:	%	42.9	50.0	33.3	0.0	75.0	33.3
From seven to ten years:	%	0.0	0.0	0.0	0.0	0.0	0.0
More than ten years:	%	0.0	0.0	0.0	0.0	0.0	0.0
6. How many years have you been a supervisor in Oman?							
From one to three years:	%	100.0	83.3	83.3	66.7	100.0	66.7
From four to six years:	%	0.0	16.7	16.7	33.3	0.0	33.3
From seven to ten years:	%	0.0	0.0	0.0	0.0	0.0	0.0
More than ten years:	%	0.0	0.0	0.0	0.0	0.0	0.0
7. What is your educational preparation ?							
College or University degree (in Education):	%	0.0	0.0	0.0	0.0	0.0	0.0
College or University degree (in other than College of Education):	%	0.0	0.0	0.0	0.0	0.0	0.0

Item IA	Subject Taught					
	Islamic Education	Arabic Language	English Language	Math	General Sciences	History
7. What is your educational preparation (con't)?						
Teacher Training Institute (2 years after Secondary School) %	0.0	0.0	5.3	0.0	0.0	0.0
Teacher Training Institute (1 year after Secondary School): %	0.0	0.0	10.5	0.0	0.0	0.0
Teacher Training Institute (5 years after Preparatory School): %	0.0	0.0	0.0	0.0	0.0	0.0
Teacher Training Institute (3 years after Preparatory School) %	100.0	93.8	36.8	100.0	83.3	100.0
8. What was the length of In-Service training you received in the subject matter(s) you supervise?						
None: %	8.3	0.0	0.0	22.2	0.0	25.0
Less than one month: %	0.0	0.0	10.5	0.0	16.7	0.0
One to three months: %	0.0	0.0	5.3	0.0	0.0	0.0
Four to six months: %	0.0	0.0	5.3	0.0	0.0	0.0
Seven to twelve months: %	0.0	6.3	5.3	0.0	0.0	0.0
One to two years: %	91.7	93.8	73.7	77.8	83.3	75.0
9. Where did you receive this In-Service training?						
In Oman: %	66.7	93.8	15.8	88.9	66.7	75.0
Outside Oman: %	33.3	6.3	84.2	11.1	33.3	25.0

Item IA	Subject Taught					
	Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
7. What is your educational preparation (con't)?						
Teacher Training Institute (2 years after Secondary School) %	0.0	0.0	0.0	0.0	0.0	0.0
Teacher Training Institute (1 year after Secondary School): %	0.0	0.0	0.0	0.0	0.0	0.0
Teacher Training Institute (5 years after Preparatory School): %	0.0	0.0	0.0	0.0	0.0	0.0
Teacher Training Institute (3 years after Preparatory School) %	100.0	100.0	100.0	100.0	100.0	100.0
8. What was the length of In-Service training you received in the subject matter(s) you supervise?						
None: %	0.0	0.0	16.7	66.7	0.0	0.0
Less than one month: %	0.0	0.0	0.0	0.0	0.0	0.0
One to three months: %	0.0	0.0	0.0	0.0	0.0	0.0
Four to six months: %	0.0	0.0	0.0	0.0	0.0	0.0
Seven to twelve months: %	0.0	0.0	0.0	0.0	0.0	0.0
One to two years: %	100.0	100.0	83.3	33.3	100.0	100.0
9. Where did you receive this In-Service training?						
In Oman: %	85.7	83.3	33.3	33.3	50.0	100.0
Outside Oman: %	14.3	16.7	66.7	66.7	50.0	0.0

Item IA		Subject Taught					
		Islamic Education	Arabic Language	English Language	Math	General Sciences	History
10. How many workshops have you attended concerning the implementation of the Omani curriculum?							
None:	%	91.7	100.0	5.3	100.0	83.3	100.0
One workshop:	%	0.0	0.0	0.0	0.0	0.0	0.0
Two workshops:	%	0.0	0.0	5.3	0.0	16.7	0.0
Three workshops:	%	0.0	0.0	0.0	0.0	0.0	0.0
More than three workshops:	%	8.3	0.0	89.5	0.0	0.0	0.0

Item IA		Subject Taught					
		Geography	Civic Education	Chemistry	Physics	Biology	Human Culture
10. How many workshops have you attended concerning the implementation of the Omani curriculum?							
None:	%	100.0	100.0	100.0	100.0	100.0	100.0
One workshop:	%	0.0	0.0	0.0	0.0	0.0	0.0
Two workshops:	%	0.0	0.0	0.0	0.0	0.0	0.0
Three workshops:	%	0.0	0.0	0.0	0.0	0.0	0.0
More than three workshops:	%	0.0	0.0	0.0	0.0	0.0	0.0

Part I Section A
General and Demographic Information
(Administrator)

Item IA	Percent
1. Sex:	
Male	60.0
Female	40.0
2. Nationality:	
Omani	42.7
Non-Omani	57.3
3. Name of your school district:	
Muscat	12.0
Batinah	12.0
Roustaq	10.7
Dakhiliyah	13.3
Sharqiyah	12.0
Wousta	12.0
Dhahirah	12.0
Janoubiyah	8.0
Musandam	8.0
4. How many years were you an administrator outside of Oman?	
From one to three years	13.7
From four to six years	19.6
From seven to ten years	25.5
More than ten years	39.2
5. How many years have you been an administrator in Oman?	
From one to three years	54.7
From four to six years	13.3
From seven to ten years	13.3
More than ten years	17.3

Item IA	Percent
6. What is your educational preparation?	
College or University degree (in Education)	56.0
College or University degree (in other than College of Education)	22.7
Teacher Training Institute (2 years after Secondary School)	1.3
Teacher Training Institute (1 year after Secondary school)	2.7
Teacher Training Institute (5 years after Preparatory school)	0.0
Teacher Training Institute (3 years after Preparatory School	1.3
Secondary School completed	0.0
Preparatory School completed	0.0
Primary School completed	0.0
Without completing Primary School	16.0
7. What was the length of In-Service training you received in administrative preparation?	
None	8.2
Less than one month	23.3
One to three months	15.1
Four to six months	2.7
Seven to twelve months	21.9
One to two years	28.8
8. Where did you receive this In-Service training?	
In Oman	31.8
Outside Oman	68.2

Item IA	Percent
9. How many workshops have you attended concerning the implementation of the Omani curriculum?	
None	50.8
One workshop	16.9
Two workshops	7.7
Three workshops	7.7
More than Three workshops	16.9

Part I Section B: Part 1
Opinion on Educational Processes
(Teacher)

Item IB1 1: The curriculum should consist of subject matter to be learned and skills to be acquired?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	49.4	20.0	8.2	3.5	18.8	3.78 (1.55)
Arabic Language	60.9	28.7	4.3	2.6	3.5	4.41 (0.95)
English Language	34.5	43.4	15.9	6.2	0.0	4.06 (0.87)
Mathematics	55.9	30.6	12.6	0.9	0.0	4.41 (0.74)
Specialized Subject Matters in The Arts						
General Sciences	46.7	40.0	10.0	3.3	0.0	4.30 (0.79)
History	60.0	30.8	7.7	1.5	0.0	4.49 (0.71)
Geography	65.3	27.8	6.9	0.0	0.0	4.58 (0.62)
Civic Education	47.5	42.5	10.0	0.0	0.0	4.38 (0.67)
Specialized Subject Matters in The Sciences						
Chemistry	61.1	29.6	5.6	3.7	0.0	4.48 (0.77)
Physics	54.4	33.3	7.0	5.3	0.0	4.37 (0.84)
Biology	56.0	24.0	14.0	4.0	2.0	4.28 (0.99)
Human Culture	48.5	36.4	15.2	0.0	0.0	4.33 (0.74)

Item IB1 2: The learning of proper attitudes is often more important than the learning of subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	19.8	32.6	19.8	15.1	12.8	3.31 (1.30)
Arabic Language	18.4	24.6	24.6	21.1	11.4	3.18 (1.28)
English Language	16.8	37.2	28.3	15.9	1.8	3.51 (1.01)
Mathematics	13.5	33.3	29.7	21.6	1.8	3.35 (1.02)
Specialized Subject Matters in The Arts						
General Sciences	0.0	24.1	37.9	31.0	6.9	2.79 (0.90)
History	23.4	32.8	21.9	7.8	14.1	3.44 (1.32)
Geography	20.8	31.9	22.2	18.1	6.9	3.42 (1.21)
Civic Education	40.0	30.0	10.0	12.5	7.5	3.83 (1.30)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	37.7	34.0	15.1	3.8	3.34 (0.98)
Physics	12.7	30.9	30.9	14.5	10.9	3.20 (1.18)
Biology	13.2	39.6	24.5	15.1	7.5	3.36 (1.13)
Human Culture	29.0	29.0	25.8	12.9	3.2	3.68 (1.14)

Item IB1 3: It is more important that the student learn how to approach and solve problems than it is for him to recall information included in the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	30.4	30.4	15.2	10.1	13.9	3.53 (1.39)
Arabic Language	45.8	30.8	12.1	5.6	5.6	4.06 (1.15)
English Language	34.0	43.0	16.0	7.0	0.0	4.04 (0.89)
Mathematics	56.5	26.9	10.2	6.5	0.0	4.33 (0.91)
Specialized Subject Matters in The Arts						
General Sciences	48.3	27.6	10.3	10.3	3.4	4.07 (1.16)
History	59.4	25.0	10.9	3.1	1.6	4.38 (0.92)
Geography	68.5	20.5	8.2	1.4	1.4	4.53 (0.82)
Civic Education	56.4	25.6	10.3	5.1	2.6	4.28 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	55.8	26.9	13.5	3.8	0.0	4.35 (0.86)
Physics	50.0	26.8	10.7	8.9	3.6	4.11 (1.14)
Biology	57.1	30.6	6.1	6.1	0.0	4.39 (0.86)
Human Culture	53.1	21.9	18.8	6.3	0.0	4.22 (0.98)

Item IB1 4: The true view of education is to so arrange learning that the student gradually builds up a storehouse of knowledge that he can use in the future?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	40.2	26.4	6.9	9.2	17.2	3.63 (1.51)
Arabic Language	72.6	16.2	5.1	2.6	3.4	4.52 (0.96)
English Language	35.1	40.5	12.6	9.9	1.8	3.97 (1.02)
Mathematics	51.4	30.3	11.0	5.5	1.8	4.24 (0.98)
Specialized Subject Matters in The Arts						
General Sciences	53.3	23.3	13.3	6.7	3.3	4.17 (1.12)
History	57.8	31.3	6.3	4.7	0.0	4.42 (0.81)
Geography	61.6	23.3	2.7	11.0	1.4	4.33 (1.06)
Civic Education	71.8	25.6	2.6	0.0	0.0	4.69 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	47.3	40.0	9.1	3.6	0.0	4.31 (0.79)
Physics	55.4	26.8	14.3	1.8	1.8	4.32 (0.92)
Biology	56.6	30.2	9.4	1.9	1.9	4.38 (0.88)
Human Culture	60.6	24.2	12.1	0.0	3.0	4.39 (0.93)

Item IB1 5: Teachers should keep in mind that students have to be made to work?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	67.5	6.3	1.2	3.7	21.2	3.95 (1.67)
Arabic Language	77.3	16.4	4.5	0.9	0.9	4.68 (0.69)
English Language	46.0	36.0	11.0	6.0	1.0	4.20 (0.93)
Mathematics	78.5	15.0	3.7	1.9	0.9	4.68 (0.72)
Specialized Subject Matters in The Arts						
General Sciences	75.0	14.3	7.1	3.6	0.0	4.61 (0.79)
History	86.2	10.8	0.0	3.1	0.0	4.80 (0.59)
Geography	86.3	12.3	1.4	0.0	0.0	4.85 (0.40)
Civic Education	84.6	10.3	2.6	2.6	0.0	4.77 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	79.2	15.1	5.7	0.0	0.0	4.74 (0.56)
Physics	80.4	12.5	3.6	1.8	1.8	4.68 (0.79)
Biology	78.0	20.0	0.0	2.0	0.0	4.74 (0.57)
Human Culture	71.9	15.6	3.1	9.4	0.0	4.50 (0.95)

Item IB1 6: Standards of achievement should not be the same for all students; they should vary from one student to another?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	55.6	9.9	9.9	6.2	18.5	3.78 (1.60)
Arabic Language	59.5	24.3	7.2	6.3	2.7	4.32 (1.04)
English Language	23.2	48.5	17.2	9.1	2.0	3.82 (0.96)
Mathematics	73.3	21.9	1.0	2.9	1.0	4.64 (0.74)
Specialized Subject Matters in The Arts						
General Sciences	62.1	27.6	6.9	3.4	0.0	4.48 (0.79)
History	68.8	21.9	9.4	0.0	0.0	4.59 (0.66)
Geography	77.8	15.3	4.2	2.8	0.0	4.68 (0.69)
Civic Education	76.9	10.3	5.1	5.1	2.6	4.54 (1.00)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	44.2	3.8	1.9	0.0	4.42 (0.67)
Physics	58.9	32.1	5.4	3.6	0.0	4.43 (0.89)
Biology	65.3	26.5	4.1	4.1	0.0	4.53 (0.77)
Human Culture	67.7	22.6	6.5	3.2	0.0	4.55 (0.77)

Item IB1 7: The goals of education should be defined in accordance with the students' interests and needs, as well as by the demands of society?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	55.8	12.8	5.8	9.3	16.3	3.83 (1.57)
Arabic Language	67.3	20.4	8.0	2.7	1.8	4.49 (0.89)
English Language	38.8	34.5	20.7	6.0	0.0	4.06 (0.92)
Mathematics	54.1	34.9	8.3	1.8	0.9	4.39 (0.79)
Specialized Subject Matters in The Arts						
General Sciences	53.3	30.0	6.7	6.7	3.3	4.23 (1.07)
History	67.7	24.6	4.6	1.5	1.5	4.55 (0.79)
Geography	67.1	24.7	5.5	2.7	0.0	4.56 (0.73)
Civic Education	67.5	25.0	7.5	0.0	0.0	4.60 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	52.7	30.9	7.3	7.3	1.8	4.26 (1.00)
Physics	57.9	31.6	7.0	1.8	1.8	4.42 (0.84)
Biology	54.9	31.4	11.8	2.0	0.0	4.39 (0.78)
Human Culture	57.6	21.2	18.2	3.0	0.0	4.33 (0.89)

Item IB1 8: Right from the very first grade, teachers must teach the student at the level of his ability and not at the level of the grade he is in?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	54.3	14.8	9.9	8.6	12.3	3.90 (1.45)
Arabic Language	45.9	21.1	15.6	6.4	11.0	3.84 (1.36)
English Language	26.3	30.3	17.2	19.2	7.1	3.50 (1.27)
Mathematics	36.4	34.6	15.0	10.3	3.7	3.90 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	34.5	31.0	10.3	17.2	6.9	3.69 (1.31)
History	56.3	18.8	9.4	6.3	9.4	4.06 (1.33)
Geography	47.9	15.1	16.4	13.7	6.8	3.84 (1.34)
Civic Education	59.0	15.4	10.3	10.3	5.1	4.13 (1.26)
Specialized Subject Matters in The Sciences						
Chemistry	36.5	26.9	17.3	11.5	7.7	3.73 (1.29)
Physics	35.7	35.7	10.7	12.5	5.4	3.84 (1.20)
Biology	42.9	26.5	16.3	6.1	8.2	3.90 (1.26)
Human Culture	53.1	21.9	12.5	12.5	0.0	4.16 (1.08)

Item IB1 9: Each subject and activity should be aimed at developing a particular part of the student's makeup: intellectual, social, physical, or spiritual?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	59.3	8.6	6.2	3.7	22.2	3.79 (1.67)
Arabic Language	67.6	18.9	6.3	4.5	2.7	4.44 (0.99)
English Language	31.3	47.9	10.4	10.4	0.0	4.00 (0.92)
Mathematics	57.0	29.9	8.4	3.7	0.9	4.38 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	62.1	17.2	20.7	0.0	0.0	4.41 (0.83)
History	72.3	18.5	9.2	0.0	0.0	4.63 (0.65)
Geography	69.9	19.2	6.8	4.1	0.0	4.55 (0.80)
Civic Education	79.5	12.8	7.7	0.0	0.0	4.72 (0.61)
Specialized Subject Matters in The Sciences						
Chemistry	60.4	24.5	15.1	0.0	0.0	4.45 (0.75)
Physics	57.1	26.8	12.5	3.6	0.0	4.38 (0.84)
Biology	66.0	20.0	8.0	6.0	0.0	4.46 (0.89)
Human Culture	68.8	6.3	18.8	3.1	3.1	4.34 (1.10)

Item IB1 10: Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to something as important as teaching tomorrow's citizens?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	40.2	18.4	11.5	9.2	20.7	3.48 (1.58)
Arabic Language	36.5	22.6	13.0	10.4	17.4	3.50 (1.50)
English Language	32.7	40.7	14.2	2.7	9.7	3.84 (1.20)
Mathematics	39.6	30.6	15.3	9.9	4.5	3.91 (1.16)
Specialized Subject Matters in The Arts						
General Sciences	26.7	26.7	16.7	20.0	10.0	3.40 (1.35)
History	49.2	26.2	15.4	6.2	3.1	4.12 (1.08)
Geography	40.3	31.9	4.2	16.7	6.9	3.82 (1.31)
Civic Education	65.0	20.0	2.5	5.0	7.5	4.30 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	40.7	18.5	27.8	7.4	5.6	3.82 (1.21)
Physics	35.1	36.8	15.8	8.8	3.5	3.91 (1.09)
Biology	40.0	18.0	20.0	16.0	6.0	3.70 (1.31)
Human Culture	48.5	24.2	6.1	15.2	6.1	3.94 (1.32)

Item IB1 11: In Omani schools, learning which is organized around life experiences is more desirable than learning organized around subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.3	27.8	27.8	20.3	3.8	3.41 (1.14)
Arabic Language	30.9	25.5	21.8	12.7	9.1	3.56 (1.30)
English Language	15.0	45.0	24.0	13.0	3.0	3.56 (1.00)
Mathematics	34.7	35.6	19.8	6.9	3.0	3.92 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	10.7	42.9	32.1	14.3	0.0	3.50 (0.88)
History	35.9	23.4	25.0	9.4	6.3	3.73 (1.23)
Geography	38.4	31.5	13.7	13.7	2.7	3.89 (1.15)
Civic Education	46.2	28.2	23.1	0.0	2.6	4.15 (0.96)
Specialized Subject Matters in the Sciences						
Chemistry	9.6	53.8	25.0	9.6	1.9	3.60 (0.87)
Physics	17.9	46.4	21.4	14.3	0.0	3.68 (0.94)
Biology	26.5	38.8	22.4	8.2	4.1	3.76 (1.07)
Human Culture	38.7	35.5	22.6	3.2	0.0	4.10 (0.87)

Item IB1 12: We should fit the curriculum to the student and not the student to the curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	50.0	10.5	9.3	12.8	17.4	3.63 (1.60)
Arabic Language	75.9	15.2	2.7	3.6	2.7	4.58 (0.92)
English Language	31.2	43.1	16.5	7.3	1.8	3.95 (0.97)
Mathematics	62.6	23.4	8.4	3.7	1.9	4.41 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	56.7	10.0	13.3	16.7	3.3	4.00 (1.31)
History	73.8	12.3	6.2	3.1	4.6	4.48 (1.06)
Geography	79.5	9.6	5.5	4.1	1.4	4.62 (0.88)
Civic Education	65.0	17.5	10.0	5.0	2.5	4.38 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	54.5	25.5	9.1	7.3	3.6	4.20 (1.11)
Physics	50.0	25.0	14.3	8.9	1.8	4.13 (1.08)
Biology	58.8	19.6	13.7	7.8	0.0	4.29 (0.99)
Human Culture	63.6	9.1	18.2	9.1	0.0	4.27 (1.07)

Item IB1 13: Subjects that sharpen the mind, like mathematics and sciences, need greater emphasis in the Omani school curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	46.1	22.4	9.2	11.8	10.5	3.82 (1.40)
Arabic Language	45.4	29.6	11.1	10.2	3.7	4.03 (1.15)
English Language	16.7	40.6	34.4	6.3	2.1	3.64 (0.84)
Mathematics	78.8	15.2	2.0	3.0	1.0	4.68 (0.75)
Specialized Subject Matters in The Arts						
General Sciences	65.5	24.1	6.9	3.4	0.0	4.52 (0.79)
History	45.3	34.4	17.2	3.1	0.0	4.22 (0.85)
Geography	47.9	29.6	14.1	5.6	2.8	4.14 (1.05)
Civic Education	44.7	21.1	21.1	7.9	5.3	3.92 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	73.1	25.0	1.9	0.0	0.0	4.71 (0.50)
Physics	72.7	25.5	0.0	1.8	0.0	4.69 (0.57)
Biology	68.0	24.0	6.0	2.0	0.0	4.58 (0.70)
Human Culture	51.7	27.6	10.3	6.9	3.4	4.17 (1.10)

Item IB1 14: The healthy interaction among students is just as important in school as the learning of subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.7	18.6	15.1	17.4	15.1	3.38 (1.48)
Arabic Language	43.8	34.8	10.7	8.0	2.7	4.09 (1.05)
English Language	23.9	43.4	22.1	7.1	3.5	3.77 (1.01)
Mathematics	32.7	40.2	17.8	7.5	1.9	3.94 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	34.5	20.7	24.1	20.7	0.0	3.69 (1.17)
History	46.2	35.4	15.4	1.5	1.5	4.23 (0.88)
Geography	54.2	31.9	4.2	8.3	1.4	4.29 (0.99)
Civic Education	66.7	25.6	5.1	2.6	0.0	4.56 (0.72)
Specialized Subject Matters in The Sciences						
Chemistry	29.6	38.9	24.1	5.6	1.9	3.89 (0.97)
Physics	29.1	38.2	23.6	7.3	1.8	3.86 (0.99)
Biology	43.8	41.7	8.3	4.2	2.1	4.21 (0.92)
Human Culture	54.5	33.3	9.1	3.0	0.0	4.39 (0.79)

Item IB1 15: The curriculum should contain an orderly arrangement of subjects that represent the best of the Omani cultural heritage?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	41.4	25.3	11.5	8.0	13.8	3.72 (1.43)
Arabic Language	55.3	31.6	7.9	1.8	3.5	4.33 (0.96)
English Language	25.2	44.1	24.3	6.3	0.0	3.88 (0.86)
Mathematics	34.9	37.6	21.1	5.5	0.9	4.00 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	40.0	40.0	13.3	3.3	3.3	4.10 (1.00)
History	55.4	35.4	6.2	3.1	0.0	4.43 (0.75)
Geography	69.4	19.4	5.6	5.6	0.0	4.53 (0.84)
Civic Education	65.8	21.1	5.3	5.3	2.6	4.42 (1.00)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	38.9	16.7	11.1	0.0	3.94 (0.98)
Physics	40.4	35.1	19.3	3.5	1.8	4.09 (0.95)
Biology	43.1	35.3	19.6	2.0	0.0	4.20 (0.83)
Human Culture	56.3	28.1	12.5	3.1	0.0	4.38 (0.83)

Item IB1 16: True discipline springs from interests, motivation, and involvement in problems relevant to the student?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	43.6	16.7	16.7	7.7	15.4	3.65 (1.48)
Arabic Language	59.8	21.5	9.3	6.5	2.8	4.29 (1.06)
English Language	23.7	40.2	29.9	5.2	1.0	3.80 (0.90)
Mathematics	41.4	26.3	17.2	12.1	3.0	3.91 (1.16)
Specialized Subject Matters in The Arts						
General Sciences	42.9	25.0	25.0	3.6	3.6	4.00 (1.09)
History	49.2	31.7	9.5	6.3	3.2	4.18 (1.06)
Geography	53.4	30.1	8.2	8.2	0.0	4.29 (0.94)
Civic Education	61.5	15.4	12.8	7.7	2.6	4.26 (1.12)
Specialized Subject Matters in The Sciences						
Chemistry	34.6	48.1	11.5	3.8	1.9	4.10 (0.89)
Physics	41.1	33.9	14.3	10.7	0.0	4.05 (1.00)
Biology	40.8	36.7	18.4	2.0	2.0	4.12 (0.93)
Human Culture	60.0	13.3	23.3	3.3	0.0	4.30 (0.95)

Item IB1 17: Emotional development and social development are as important in the evaluation of a student's progress as academic achievement?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	47.7	17.0	9.1	10.2	15.9	3.71 (1.53)
Arabic Language	66.7	24.8	5.1	0.9	2.6	4.52 (0.85)
English Language	21.4	50.0	18.8	6.3	3.6	3.80 (0.97)
Mathematics	47.7	34.9	9.2	5.5	2.8	4.19 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	66.7	23.3	3.3	3.3	3.3	4.47 (0.97)
History	65.6	26.6	1.6	4.7	1.6	4.50 (0.87)
Geography	65.8	23.3	6.8	4.1	0.0	4.51 (0.80)
Civic Education	67.5	17.5	12.5	2.5	0.0	4.50 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	50.9	43.6	5.5	0.0	0.0	4.46 (0.60)
Physics	43.9	45.6	8.8	1.8	0.0	4.32 (0.71)
Biology	51.9	33.3	9.3	5.6	0.0	4.32 (0.87)
Human Culture	54.5	18.2	12.1	12.1	3.0	4.09 (1.21)

Item IB1 18: Students should be taught that all problems should be subjected to critical and objective analysis, whether the problems are religious, moral, economic, or social in nature?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	48.1	19.8	9.9	4.9	17.3	3.77 (1.52)
Arabic Language	54.5	23.6	15.5	2.7	3.6	4.23 (1.05)
English Language	18.2	39.4	24.2	13.1	5.1	3.53 (1.09)
Mathematics	51.4	31.8	12.1	3.7	0.9	4.29 (0.89)
Specialized Subject Matters in The Arts						
General Sciences	44.8	41.4	6.9	3.4	3.4	4.21 (0.98)
History	58.5	21.5	15.4	3.1	1.5	4.32 (0.95)
Geography	69.9	15.1	8.2	6.8	0.0	4.48 (0.92)
Civic Education	65.8	21.1	10.5	2.6	0.0	4.50 (0.80)
Specialized Subject Matters in The Sciences						
Chemistry	45.3	45.3	7.5	1.9	0.0	4.34 (0.71)
Physics	40.0	36.4	14.5	7.3	1.8	4.06 (1.01)
Biology	48.0	36.0	8.0	8.0	0.0	4.24 (0.92)
Human Culture	65.6	21.9	9.4	3.1	0.0	4.50 (0.80)

Item IB1 19: Learning is experimental; the student should be taught to test alternatives before accepting any of them?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.7	26.2	15.0	15.0	10.0	3.59 (1.36)
Arabic Language	41.4	30.6	17.1	6.3	4.5	3.98 (1.12)
English Language	13.1	47.5	22.2	10.1	7.1	3.50 (1.07)
Mathematics	38.8	42.7	12.6	4.9	1.0	4.14 (0.89)
Specialized Subject Matters in The Arts						
General Sciences	55.2	17.2	13.8	6.9	6.9	4.07 (1.28)
History	33.8	30.8	24.6	3.1	7.7	3.80 (1.18)
Geography	30.1	23.3	24.7	20.5	1.4	3.60 (1.16)
Civic Education	43.6	35.9	12.8	7.7	0.0	4.15 (0.93)
Specialized Subject Matters in The Sciences						
Chemistry	46.2	40.4	9.6	3.8	0.0	4.29 (0.80)
Physics	44.6	32.1	14.3	5.4	3.6	4.09 (1.07)
Biology	44.0	42.0	10.0	4.0	0.0	4.26 (0.80)
Human Culture	40.0	36.7	16.7	3.3	3.3	4.07 (1.02)

Part I Section B: Part 1
Opinion on Educational Processes
(Supervisor)

Item IB1 1: The curriculum should consist of subject matter to be learned and skills to be acquired?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	8.3	16.7	0.0	66.7	1.92 (1.44)
Arabic Language	68.8	12.5	0.0	6.3	12.5	4.19 (1.47)
English Language	31.6	26.3	26.3	15.8	0.0	3.74 (1.10)
Mathematics	22.2	77.8	0.0	0.0	0.0	4.22 (0.44)
Specialized Subject Matters in The Arts						
General Sciences	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
History	50.0	50.0	0.0	0.0	0.0	4.50 (0.54)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Specialized Subject Matters in The Arts						
Chemistry	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IB1 2: The learning of proper attitudes is often more important than the learning of subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	33.3	16.7	41.7	2.08 (1.08)
Arabic Language	6.3	50.0	31.3	6.3	6.3	3.44 (0.96)
English Language	15.8	31.6	15.8	10.5	26.3	3.00 (1.49)
Mathematics	22.2	22.2	33.3	11.1	11.1	3.33 (1.32)
Specialized Subject Matters in The Arts						
General Sciences	0.0	33.3	50.0	0.0	16.7	3.00 (1.10)
History	50.0	50.0	0.0	0.0	0.0	4.50 (0.54)
Geography	28.6	57.1	14.3	0.0	0.0	4.14 (0.69)
Civic Education	16.7	66.7	16.7	0.0	0.0	3.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IB1 3: It is more important that the student learn how to approach and solve problems than it is for him to recall information included in the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	8.3	16.7	66.7	1.58 (1.00)
Arabic Language	75.0	12.5	0.0	6.3	6.3	4.44 (1.21)
English Language	33.3	22.2	27.8	0.0	16.7	3.56 (1.42)
Mathematics	33.3	33.3	33.3	0.0	0.0	4.00 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	60.0	40.0	0.0	0.0	0.0	4.60 (0.55)
History	75.0	25.0	0.0	0.0	0.0	4.75 (0.46)
Geography	85.7	0.0	14.3	0.0	0.0	4.71 (0.76)
Civic Education	83.3	0.0	0.0	16.7	0.0	4.50 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human culture	66.7	0.0	0.0	33.3	0.0	4.00 (1.73)

Item IB1 4: The true view of education is to so arrange learning that the student gradually builds up a storehouse of knowledge that he can use in the future?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	8.3	66.7	1.67 (1.07)
Arabic Language	56.3	18.8	6.3	18.8	0.0	4.13 (1.20)
English Language	42.1	10.5	31.6	15.8	0.0	3.79 (1.18)
Mathematics	11.1	55.6	11.1	22.2	0.0	3.56 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
History	75.0	12.5	12.5	0.0	0.0	4.63 (0.74)
Geography	85.7	0.0	14.3	0.0	0.0	4.71 (0.76)
Civic Education	83.3	0.0	0.0	16.7	0.0	4.50 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB1 5: Teachers should keep in mind that students have to be made to work?

	Fully / Greatly		Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	16.7	83.3	1.17 (0.39)
Arabic Language	68.8	12.5	6.3	6.3	6.3	4.31 (1.25)
English Language	38.9	33.3	16.7	11.1	0.0	4.00 (1.03)
Mathematics	44.4	55.6	0.0	0.0	0.0	4.44 (0.53)
Specialized Subject Matters in The Arts						
General Sciences	80.0	20.0	0.0	0.0	0.0	4.80 (0.45)
History	87.5	12.5	0.0	0.0	0.0	4.88 (0.35)
Geography	71.4	14.3	14.3	0.0	0.0	4.57 (0.79)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB1 6: Standards of achievement should not be the same for all students; they should vary from one student to another?

	Fully / Greatly		Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	25.0	25.0	41.7	2.08 (1.24)
Arabic Language	62.5	18.8	0.0	12.5	6.3	4.19 (1.33)
English Language	17.6	52.9	11.8	5.9	11.8	3.59 (1.23)
Mathematics	33.3	55.6	11.1	0.0	0.0	4.22 (0.67)
Specialized Subject Matters in The Arts						
General Sciences	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
History	75.0	25.0	0.0	0.0	0.0	4.75 (0.46)
Geography	71.4	0.0	28.6	0.0	0.0	4.43 (0.98)
Civic Education	66.7	0.0	0.0	33.3	0.0	4.00 (1.55)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Human Culture	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)

Item IB1 7: The goals of education should be defined in accordance with the students' interests and needs, as well as by the demands of society?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	8.3	8.3	75.0	1.58 (1.24)
Arabic Language	75.0	6.3	6.3	0.0	12.5	4.31 (1.40)
English Language	31.6	26.3	21.1	15.8	5.3	3.63 (1.26)
Mathematics	44.	44.4	11.1	0.0	0.0	4.33 (0.71)
Specialized Subject Matters in The Arts						
General Sciences	83.3	16.7	0.0	0.0	0.0	4.83 (0.41)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	71.4	14.3	14.3	0.0	0.0	4.57 (0.79)
Civic Education	66.7	16.7	0.0	16.7	0.0	4.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB1 8: Right from the very first grade, teachers must teach the student at the level of his ability and not at the level of the grade he is in?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	8.3	16.7	41.7	25.0	2.33 (1.23)
Arabic Language	43.8	37.5	6.3	0.0	12.5	4.00 (1.32)
English Language	11.1	22.2	22.2	16.7	27.8	2.72 (1.41)
Mathematics	22.2	33.3	33.3	11.1	0.0	3.67 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
History	62.5	25.0	12.5	0.0	0.0	4.50 (0.76)
Geography	57.1	0.0	42.9	0.0	0.0	4.14 (1.07)
Civic Education	50.0	0.0	33.3	0.0	16.7	3.67 (1.63)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Physics	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)

Item IB1 9: Each subject and activity should be aimed at developing a particular part of the student's makeup: intellectual, social, physical, or spiritual?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	0.0	50.0	50.0	1.50 (0.52)
Arabic Language	43.8	37.5	6.3	6.3	6.3	4.06 (1.18)
English Language	27.8	16.7	27.8	22.2	5.6	3.39 (1.29)
Mathematics	33.3	44.4	22.2	0.0	0.0	4.11 (0.78)
Specialized Subject Matters in The Arts						
General Sciences	60.0	40.0	0.0	0.0	0.0	4.60 (0.55)
History	75.0	12.5	12.5	0.0	0.0	4.63 (0.74)
Geography	57.1	14.3	14.3	0.0	14.3	4.00 (1.53)
Civic Education	66.7	0.0	33.3	0.0	0.0	4.33 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB1 10: Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to something as important as teaching tomorrow's citizens?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	0.0	36.4	63.6	1.36 (0.51)
Arabic Language	56.3	31.3	0.0	0.0	12.5	4.19 (1.33)
English Language	21.1	47.4	10.5	21.1	0.0	3.68 (1.06)
Mathematics	44.4	44.4	0.0	11.1	0.0	4.22 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
History	25.0	37.5	25.0	12.5	0.0	3.75 (1.04)
Geography	28.6	28.6	28.6	0.0	14.3	3.57 (1.40)
Civic Education	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IB1 11: In Omani schools, learning which is organized around life experiences is more desirable than learning organized around subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	16.7	58.3	1.75 (1.06)
Arabic Language	18.8	43.8	18.8	12.5	6.3	3.56 (1.15)
English Language	22.2	5.6	38.9	33.3	0.0	3.17 (1.15)
Mathematics	44.4	33.3	22.2	0.0	0.0	4.22 (0.83)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	40.0	20.0	0.0	3.40 (1.14)
History	37.5	37.5	12.5	12.5	0.0	4.00 (1.07)
Geography	28.6	28.6	28.6	14.3	0.0	3.71 (1.11)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in the Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IB1 12: We should fit the curriculum to the student and not the student to the curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	9.1	45.5	45.5	1.64 (0.67)
Arabic Language	68.8	6.3	12.5	0.0	12.5	4.19 (1.42)
English Language	21.1	26.3	21.1	15.8	15.8	3.21 (1.40)
Mathematics	22.2	44.4	22.2	0.0	11.1	3.67 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
History	50.0	50.0	0.0	0.0	0.0	4.50 (0.54)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	66.7	0.0	33.3	0.0	0.0	4.33 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IB1 13: Subjects that sharpen the mind, like mathematics and sciences, need greater emphasis in the Omani school curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	25.0	75.0	1.25 (0.45)
Arabic Language	37.5	37.5	12.5	6.3	6.3	3.94 (1.18)
English Language	22.2	33.3	33.3	11.1	0.0	3.67 (0.97)
Mathematics	66.7	33.3	0.0	0.0	0.0	4.67 (0.50)
Specialized Subject Matters in The Arts						
General Sciences	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
History	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	66.7	16.7	0.0	0.0	16.7	4.17 (1.60)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)

Item IB1 14: The healthy interaction among students is just as important in school as the learning of subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	33.3	41.7	1.92 (1.00)
Arabic Language	68.8	31.3	0.0	0.0	0.0	4.69 (0.48)
English Language	22.2	16.7	22.2	22.2	16.7	3.06 (1.43)
Mathematics	22.2	33.3	33.3	11.1	0.0	3.67 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	28.6	57.1	14.3	0.0	0.0	4.14 (0.69)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB1 15: The curriculum should contain an orderly arrangement of subjects that represent the best of the Omani cultural heritage?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	25.0	58.3	1.58 (0.79)
Arabic Language	56.3	31.3	0.0	0.0	12.5	4.19 (1.33)
English Language	26.3	26.3	26.3	15.8	5.3	3.53 (1.22)
Mathematics	11.1	55.6	33.3	0.0	0.0	3.78 (0.67)
Specialized Subject Matters in The Arts						
General Sciences	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
History	50.0	37.5	12.5	0.0	0.0	4.38 (0.74)
Geography	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
Civic Education	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IB1 16: True discipline springs from interests, motivation, and involvement in problems relevant to the student?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	8.3	66.7	1.67 (1.07)
Arabic Language	43.8	25.0	12.5	12.5	6.3	3.88 (1.31)
English Language	27.8	33.3	5.6	22.2	11.1	3.44 (1.42)
Mathematics	25.0	25.0	25.0	12.5	12.5	3.38 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	60.0	20.0	20.0	0.0	0.0	4.40 (0.89)
History	62.5	25.0	12.5	0.0	0.0	4.50 (0.76)
Geography	71.4	14.3	0.0	14.3	0.0	4.43 (1.13)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
Human Culture	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)

Item IB1 17: Emotional development and social development are as important in the evaluation of a student's progress as academic achievement?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	0.0	16.7	83.3	1.17 (0.39)
Arabic Language	62.5	18.8	12.5	6.3	0.0	4.38 (0.96)
English Language	26.3	31.6	31.6	5.3	5.3	3.68 (1.11)
Mathematics	33.3	11.1	22.2	33.3	0.0	3.44 (1.33)
Specialized Subject Matters in The Arts						
General Sciences	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	57.1	14.3	14.3	14.3	0.0	4.14 (1.22)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB1 18: Students should be taught that all problems should be subjected to critical and objective analysis, whether the problems are religious, moral, economic, or social in nature?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	0.0	41.7	50.0	1.67 (0.89)
Arabic Language	62.5	18.8	6.3	6.3	6.3	4.25 (1.24)
English Language	11.1	11.1	38.9	27.8	11.1	2.83 (1.15)
Mathematics	22.2	22.2	33.3	22.2	0.0	3.44 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	60.0	40.0	0.0	0.0	0.0	4.60 (0.55)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB1 19: Learning is experimental; the student should be taught to test alternatives before accepting any of them?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	25.0	33.3	33.3	2.08 (1.00)
Arabic Language	18.8	43.8	31.3	6.3	0.0	3.75 (0.86)
English Language	33.3	22.2	22.2	11.1	11.1	3.56 (1.38)
Mathematics	11.1	55.6	22.2	11.1	0.0	3.67 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	40.0	20.0	40.0	0.0	0.0	4.00 (1.00)
History	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
Geography	14.3	42.9	28.6	14.3	0.0	3.57 (0.98)
Civic Education	16.7	16.7	16.7	50.0	0.0	3.00 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Part I Section B: Part 1
Opinion on Educational Processes
(Administrator)

Item IBI	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The curriculum should consist of subject matter to be learned and skills to be acquired?	66.7	29.3	2.7	0.0	1.3	4.60 (0.68)
2. The learning of proper attitudes is often more important than the learning of subject matter?	25.3	26.7	32.0	14.7	1.3	3.60 (1.07)
3. It is more important that the student learn how to approach and solve problems than it is for him to recall information included in the subject matter?	57.3	24.0	10.7	6.7	1.3	4.29 (1.00)
4. The true view of education is to so arrange learning that the student gradually builds up a storehouse of knowledge that he can use in the future?	51.4	36.1	5.6	1.4	5.6	4.26 (1.04)
5. Teachers should keep in mind that students have to be made to work?	77.3	17.3	4.0	0.0	1.3	4.69 (0.68)
6. Standards of achievement should not be the same for all students: they should vary from one student to another?	62.2	29.7	5.4	1.4	1,4	4.50 (0.78)
7. The goals of education should be defined in accordance with the students' interests and needs, as well as by the demands of society?	72.0	20.0	6.7	0.0	1.3	4.61 (0.73)
8. Right from the very first grade, teachers must teach the student at the level of his ability and not at the level of the grade he is in?	35.1	20.3	24.3	14.9	5.4	3.65 (1.25)
9. Each subject and activity should be aimed at developing a particular part of the student's makeup: intellectual, social, physical, or spiritual?	78.7	14.7	5.3	0.0	1.3	4.69 (0.70)
IO. Teahers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to something as important as teaching tomorrow's citizens?	57.3	20.0	12.0	8.0	2.7	4.21 (1.11)
11. In Omani schools, learning which is organized around life experiences is more desirable than learning organized around subject matter?	26.7	40.0	24.0	9.3	0.0	3.84 (0.93)
12. We should fit the curriculum to the student and not the student to the curriculum?	45.3	36.0	14.7	2.7	1.3	4.21 (0.89)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IB1 con't	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. Subjects that sharpen the mind, like mathematics and sciences, need greater emphasis in the Omani school curriculum?	66.7	21.3	6.7	2.7	2.7	4.47 (0.94)
14. The healthy interaction among students is just as important in school as the learning of subject matter?	28.0	41.3	18.7	9.3	2.7	3.83 (1.03)
15. The curriculum should contain an orderly arrangement of subjects that represent the best of the Omani cultural heritage?	62.2	33.8	2.7	0.0	1.4	4.55 (0.69)
16. True discipline springs from interests, motivation, and involvement in problems relevant to the student?	52.0	22.7	18.7	5.3	1.3	4.19 (1.01)
17. Emotional development and social development are as important in the evaluation of a student's progress as academic achievement?	68.5	21.9	6.8	0.0	2.7	4.53 (0.85)
18. Students should be taught that all problems should be subjected to critical and objective analysis, whether the problems are religious, moral, economic, or social in nature?	50.0	41.9	4.1	2.7	1.4	4.37 (0.80)
19. Learning is experimental; the student should be taught to test alternatives before accepting any of them?	33.3	40.0	22.7	4.0	0.0	4.03 (0.85)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part I Section B: Part 2
Omani Educational Objectives
(Teacher)

Item IB2 1: To what extent do the general objectives of the Omani Educational Curriculum: Develop a loyalty to the Omani Society?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	57.5	8.0	4.6	6.9	23.0	3.70 (1.71)
Arabic Language	67.8	20.9	6.1	2.6	2.6	4.49 (0.92)
English Language	37.4	34.8	20.0	3.5	4.3	3.97 (1.06)
Mathematics	51.4	32.1	10.1	4.6	1.8	4.27 (0.95)
Specialized Subject Matters in The Arts						
General Sciences	50.0	23.3	16.7	6.7	3.3	4.10 (1.13)
History	73.4	15.6	7.8	1.6	1.6	4.58 (0.83)
Geography	78.1	15.1	4.1	2.7	0.0	4.69 (0.69)
Civic Education	85.0	7.5	2.5	5.0	0.0	4.73 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	61.1	37.0	1.9	0.0	0.0	4.59 (0.53)
Physics	61.4	17.5	14.0	3.5	3.5	4.30 (1.07)
Biology	66.7	21.6	2.0	7.8	2.0	4.43 (1.01)
Human Culture	76.7	16.7	6.7	0.0	0.0	4.70 (0.60)

Item IB2 2: To what extent do the general objectives of the Omani Educational Curriculum: Develop and encourage desirable societial behavior?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	43.2	17.3	12.3	9.9	17.3	3.59 (1.54)
Arabic Language	46.4	22.3	17.0	6.3	8.0	3.93 (1.27)
English Language	4.5	31.8	41.8	12.7	9.1	3.10 (1.00)
Mathematics	25.7	37.1	21.0	11.4	4.8	3.68 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	26.7	26.7	23.3	13.3	10.0	3.47 (1.31)
History	50.0	32.8	10.9	4.7	1.6	4.25 (0.94)
Geography	52.8	23.6	13.9	9.7	0.0	4.19 (1.02)
Civic Education	66.7	20.5	5.1	7.7	0.0	4.46 (0.91)
Specialized Subject Matters in The Sciences						
Chemistry	25.5	41.8	21.8	5.5	5.5	3.76 (1.07)
Physics	25.0	46.4	17.9	5.4	5.4	3.80 (1.05)
Biology	39.6	35.8	18.9	3.8	1.9	4.08 (0.96)
Human Culture	50.0	25.0	15.6	6.3	3.1	4.13 (1.10)

Item IB2 3: To what extent do the general objectives of the Omani Educational Curriculum: Promote awareness and encourage fulfillment of civic responsibilities?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	37.5	16.2	27.5	11.2	7.5	3.65 (1.29)
Arabic Language	33.0	33.9	21.1	8.3	3.7	3.84 (1.09)
English Language	10.2	42.9	34.7	10.2	2.0	3.49 (0.89)
Mathematics	18.3	40.4	28.8	10.6	1.9	3.63 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	24.1	44.8	17.2	10.3	3.4	3.76 (1.06)
History	30.8	35.4	24.6	7.7	1.5	3.86 (1.00)
Geography	25.0	45.8	18.1	11.1	0.0	3.85 (0.93)
Civic Education	35.9	35.9	10.3	17.9	0.0	3.90 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	18.9	45.3	30.2	5.7	0.0	3.77 (0.82)
Physics	16.1	32.1	44.6	5.4	1.8	3.55 (0.89)
Biology	30.0	42.0	24.0	4.0	0.0	3.98 (0.85)
Human Culture	46.9	25.0	21.9	6.3	0.0	4.13 (0.98)

Item IB2 4: To what extent do the general objectives of the Omani Educational Curriculum: Develop and encourage desirable scientific and social views?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	43.6	19.2	12.8	11.5	12.8	3.69 (1.45)
Arabic Language	54.1	29.4	7.3	6.4	2.8	4.26 (1.03)
English Language	12.1	44.4	37.4	6.1	0.0	3.63 (0.78)
Mathematics	50.9	35.8	8.5	3.8	0.9	4.32 (0.86)
Specialized Subject Matters in The Arts						
General Sciences	51.9	25.9	22.2	0.0	0.0	4.30 (0.82)
History	61.5	20.0	15.4	3.1	0.0	4.40 (0.86)
Geography	55.6	27.8	12.5	4.2	0.0	4.35 (0.86)
Civic Education	69.2	17.9	7.7	5.1	0.0	4.51 (0.85)
Specialized Subject Matters in The Sciences						
Chemistry	37.7	58.5	3.8	0.0	0.0	4.34 (0.55)
Physics	45.5	41.8	9.1	1.8	1.8	4.27 (0.85)
Biology	46.9	42.9	6.1	2.0	2.0	4.31 (0.85)
Human Culture	53.1	18.8	18.8	9.4	0.0	4.16 (1.05)

Item IB2 5: To what extent do the general objectives of the Omani Educational Curriculum: Promote an awareness that learning is a life-long process and continues through-out individual's lifetime?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	60.9	11.5	2.3	2.3	23.0	3.85 (1.67)
Arabic Language	67.5	19.3	6.1	3.5	3.5	4.44 (1.01)
English Language	48.7	23.0	15.0	9.7	3.5	4.04 (1.16)
Mathematics	72.1	14.4	7.2	4.5	1.8	4.51 (0.94)
Specialized Subject Matters in The Arts						
General Sciences	66.7	26.7	6.7	0.0	0.0	4.60 (0.62)
History	81.3	9.4	6.3	3.1	0.0	4.69 (0.73)
Geography	80.8	13.7	1.4	4.1	0.0	4.71 (0.70)
Civic Education	70.0	17.5	7.5	2.5	2.5	4.50 (0.93)
Specialized Subject Matters in The Sciences						
Chemistry	67.3	27.3	3.6	1.8	0.0	4.60 (0.66)
Physics	66.7	22.8	7.0	1.8	1.8	4.51 (0.85)
Biology	62.7	27.5	3.9	3.9	2.0	4.45 (0.90)
Human Culture	72.7	15.2	6.1	3.0	3.0	4.52 (0.97)

Item IB2 6: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate the capacity to experience multiple loyalties (eg. family, country, religion, culture) and identities?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	54.0	14.9	9.2	5.7	16.1	3.85 (1.52)
Arabic Language	62.3	21.1	9.6	6.1	0.9	4.38 (0.95)
English Language	7.2	37.8	35.1	17.1	2.7	3.30 (0.93)
Mathematics	43.2	29.7	14.4	11.7	0.9	4.03 (1.07)
Specialized Subject Matters in The Arts						
General Sciences	53.3	23.3	13.3	6.7	3.3	4.17 (1.12)
History	70.8	16.9	9.2	3.1	0.0	4.55 (0.79)
Geography	75.0	19.4	2.8	2.8	0.0	4.67 (0.67)
Civic Education	67.5	25.0	5.0	2.5	0.0	4.58 (0.71)
Specialized Subject Matters in The Sciences						
Chemistry	50.9	38.2	7.3	3.6	0.0	4.36 (0.78)
Physics	49.1	35.1	12.3	0.0	3.5	4.26 (0.94)
Biology	49.0	31.4	15.7	2.0	2.0	4.24 (0.93)
Human Culture	66.7	27.3	3.0	3.0	0.0	4.58 (0.71)

Item IB2 7: To what extent do the general objectives of the Omani Educational Curriculum: Promote an appreciation for the diversity in human behavior beliefs, and customs?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	41.9	25.6	11.6	7.0	14.0	3.74 (1.42)
Arabic Language	52.6	29.8	14.0	2.6	0.9	4.31 (0.87)
English Language	21.4	47.3	17.9	9.8	3.6	3.73 (1.02)
Mathematics	34.6	35.5	22.4	5.6	1.9	3.95 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	34.5	48.3	10.3	6.9	0.0	4.10 (0.86)
History	47.7	30.8	18.5	1.5	1.5	4.22 (0.91)
Geography	39.7	39.7	15.1	4.1	1.4	4.12 (0.91)
Civic Education	55.0	25.0	12.5	7.5	0.0	4.28 (0.96)
Specialized Subject Matters in The Sciences						
Chemistry	40.0	40.0	16.4	3.6	0.0	4.16 (0.83)
Physics	36.8	43.9	12.3	7.0	0.0	4.11 (0.88)
Biology	37.3	41.2	15.7	5.9	0.0	4.10 (0.88)
Human Culture	33.3	30.3	21.2	15.2	0.0	3.82 (1.07)

Item IB2 8: To what extent do the general objectives of the Omani Educational Curriculum: Develop the capacity for independent study, for continuing learning outside of the classroom?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	36.7	26.6	12.7	7.6	16.5	3.60 (1.46)
Arabic Language	50.0	24.5	10.0	12.7	2.7	4.06 (1.17)
English Language	9.2	28.6	25.5	26.5	10.2	3.00 (1.16)
Mathematics	35.2	27.6	19.0	12.4	5.7	3.74 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	46.4	21.4	17.9	7.1	7.1	3.93 (1.27)
History	50.8	30.8	6.2	4.6	7.7	4.12 (1.21)
Geography	38.4	37.0	5.5	15.1	4.1	3.90 (1.19)
Civic Education	53.8	25.6	10.3	10.3	0.0	4.23 (1.01)
Specialized Subject Matters in The Sciences						
Chemistry	43.4	28.3	20.8	5.7	1.9	4.06 (1.03)
Physics	25.5	49.1	16.4	5.5	3.6	3.87 (0.98)
Biology	49.0	30.6	14.3	4.	2.0	4.20 (0.98)
Human Culture	37.5	37.5	15.6	6.3	3.1	4.00 (1.05)

Item IB2 9: To what extent do the general objectives of the Omani Educational Curriculum: Promote a positive attitude toward learning and inquiry?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	45.9	20.0	8.2	11.8	14.1	3.72 (1.49)
Arabic Language	57.0	33.3	6.1	0.9	2.6	4.41 (0.86)
English Language	37.5	29.5	19.6	10.7	2.7	3.88 (1.11)
Mathematics	56.1	29.0	8.4	5.6	0.9	4.34 (0.92)
Specialized Subject Matters in The Arts						
General Sciences	53.3	33.3	6.7	6.7	0.0	4.33 (0.88)
History	60.0	31.7	6.7	0.0	1.7	4.48 (0.77)
Geography	65.3	26.4	2.8	5.6	0.0	4.51 (0.81)
Civic Education	55.0	27.5	17.5	0.0	0.0	4.38 (0.77)
Specialized Subject Matters in The Sciences						
Chemistry	54.5	36.4	9.1	0.0	0.0	4.46 (0.66)
Physics	57.1	32.1	5.4	5.4	0.0	4.41 (0.83)
Biology	52.0	32.0	10.0	4.0	2.0	4.28 (0.95)
Human Culture	54.5	15.2	21.2	9.1	0.0	4.15 (1.06)

Item IB2 10: To what extent do the general objectives of the Omani Educational Curriculum: The Curriculum should reflect skills in analyzing issues and problems?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	42.4	23.5	11.8	8.2	14.1	3.72 (1.44)
Arabic Language	55.3	31.6	8.8	2.6	1.8	4.36 (0.88)
English Language	23.2	44.6	23.2	8.0	0.9	3.81 (0.92)
Mathematics	54.1	28.4	11.9	5.5	0.0	4.31 (0.89)
Specialized Subject Matters in The Arts						
General Sciences	43.3	40.0	10.0	3.3	3.3	4.17 (0.99)
History	64.1	25.0	4.7	6.3	0.0	4.47 (0.85)
Geography	54.8	34.2	9.6	1.4	0.0	4.43 (0.73)
Civic Education	57.5	17.5	20.0	5.0	0.0	4.28 (0.96)
Specialized Subject Matters in The Sciences						
Chemistry	41.8	43.6	14.5	0.0	0.0	4.27 (0.71)
Physics	47.4	38.6	8.8	1.8	3.5	4.25 (0.95)
Biology	48.0	32.0	10.0	8.0	2.0	4.16 (1.04)
Human Culture	42.4	24.2	27.3	6.1	0.0	4.03 (0.98)

Item IB2 11: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate critical thinking skills, such as skills in structuring pertinent questions, or gathering and organizing data, and making generalizations, etc.?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	40.7	22.1	12.8	14.0	10.5	3.69 (1.40)
Arabic Language	53.1	24.8	14.2	5.3	2.7	4.20 (1.05)
English Language	11.6	39.3	31.3	17.9	0.0	3.45 (0.92)
Mathematics	47.7	30.3	13.8	7.3	0.9	4.17 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	50.0	30.0	10.0	10.0	0.0	4.20 (1.00)
History	65.1	19.0	15.9	0.0	0.0	4.49 (0.76)
Geography	67.6	18.3	7.0	7.0	0.0	4.47 (0.91)
Civic Education	66.7	23.1	7.7	2.6	0.0	4.54 (0.76)
Specialized Subject Matters in The Sciences						
Chemistry	59.3	22.2	16.7	1.9	0.0	4.39 (0.83)
Physics	40.4	40.4	12.3	5.3	1.8	4.12 (0.95)
Biology	36.7	38.8	18.4	4.1	2.0	4.04 (0.96)
Human Culture	54.5	21.2	12.1	12.1	0.0	4.18 (1.07)

Item IB2 12: To what extent do the general objectives of the Omani Educational Curriculum: Develop the ability to judge the validity of evidence and draw sound conclusions from data?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.1	25.6	24.4	16.3	4.7	3.58 (1.20)
Arabic Language	31.9	33.6	23.0	9.7	1.8	3.84 (1.04)
English Language	3.6	29.5	49.1	17.0	0.9	3.18 (0.79)
Mathematics	18.9	37.8	30.6	10.8	1.8	3.61 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	23.3	46.7	16.7	13.3	0.0	3.80 (0.96)
History	34.9	23.8	31.7	6.3	3.2	3.81 (1.09)
Geography	17.8	45.2	27.4	8.2	1.4	3.70 (0.91)
Civic Education	48.7	25.6	17.9	5.1	2.6	4.13 (1.06)
Specialized Subject Matters in The Sciences						
Chemistry	21.8	52.7	21.8	3.6	0.0	3.93 (0.77)
Physics	28.1	43.9	17.5	8.8	1.8	3.88 (0.98)
Biology	31.4	39.2	21.6	5.9	2.0	3.92 (0.98)
Human Culture	30.3	27.3	33.3	9.1	0.0	3.79 (0.99)

Item IB2 13: To what extent do the general objectives of the Omani Educational Curriculum: Promote a capacity to recognize and tolerate complexity and ambiguity?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	40.0	24.7	7.1	14.1	14.1	3.62 (1.48)
Arabic Language	54.0	31.0	13.3	0.9	0.9	4.36 (0.81)
English Language	15.9	39.8	29.2	15.0	0.0	3.57 (0.93)
Mathematics	42.7	30.0	20.0	5.5	1.8	4.06 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	50.0	36.7	6.7	6.7	0.0	4.30 (0.88)
History	53.8	24.6	16.9	3.1	1.5	4.26 (0.96)
Geography	67.1	20.5	5.5	5.5	1.4	4.67 (0.93)
Civic Education	55.0	25.0	15.0	5.0	0.0	4.30 (0.91)
Specialized Subject Matters in The Sciences						
Chemistry	45.5	36.4	14.5	3.6	0.0	4.24 (0.84)
Physics	45.6	31.6	19.3	1.8	1.8	4.18 (0.93)
Biology	35.3	47.1	9.8	7.8	0.0	4.10 (0.88)
Human Culture	45.5	39.4	15.2	0.0	0.0	4.30 (0.73)

Item IB2 14: To the extent that there is evidence of long-range goals of the Omani Educational Curriculum and considering the nature and importance of the history, philosophy, and the lives of Arabic and Islamic scholars as major cultural influences?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	21.4	32.1	26.2	14.3	6.0	3.49 (1.16)
Arabic Language	31.9	33.6	19.5	14.2	0.9	3.81 (1.07)
English Language	18.5	43.5	26.9	6.5	4.6	3.65 (1.01)
Mathematics	15.9	29.0	29.0	18.7	7.5	3.27 (1.16)
Specialized Subject Matters in The Arts						
General Sciences	43.3	33.3	20.0	0.0	3.3	4.13 (0.97)
History	42.2	34.4	14.1	6.3	3.1	4.06 (1.05)
Geography	26.8	47.9	16.9	8.5	0.0	3.93 (0.88)
Civic Education	47.4	28.9	13.2	7.9	2.6	4.11 (1.09)
Specialized Subject Matters in The Sciences						
Chemistry	23.6	43.6	23.6	7.3	1.8	3.80 (0.95)
Physics	30.4	33.9	26.8	7.1	1.8	3.84 (1.01)
Biology	29.4	43.1	19.6	5.9	2.0	3.92 (0.96)
Human Culture	42.4	27.3	21.2	9.1	0.0	4.03 (1.02)

Item IB2 15: To what extent do the general objectives of the Omani Educational Curriculum: Develop knowledge of facts and concepts that are basic to understanding of the Omani cultural heritage?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	45.5	15.6	13.0	9.1	16.9	3.64 (1.54)
Arabic Language	56.5	29.6	7.4	4.6	1.9	4.34 (0.94)
English Language	17.3	37.8	34.7	10.2	0.0	3.62 (0.89)
Mathematics	32.3	33.3	21.2	8.1	5.1	3.80 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	53.6	21.4	17.9	3.6	3.6	4.18 (1.09)
History	71.4	19.0	6.3	1.6	1.6	4.57 (0.82)
Geography	63.0	28.8	5.5	2.7	0.0	4.52 (0.73)
Civic Education	69.2	17.9	7.7	5.1	0.0	4.51 (0.85)
Specialized Subject Matters in The Sciences						
Chemistry	30.8	44.2	19.2	3.8	1.9	3.98 (0.92)
Physics	37.5	32.1	19.6	3.6	7.1	3.89 (1.17)
Biology	38.8	38.8	14.3	6.1	2.0	4.06 (0.99)
Human Culture	58.1	29.0	9.7	3.2	0.0	4.42 (0.81)

Item IB2 16: To what extent do the general objectives of the Omani Educational Curriculum: Encourage the ability to work together cooperatively on group projects?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	43.6	15.4	14.1	12.8	14.1	3.62 (1.50)
Arabic Language	48.6	30.3	12.8	1.8	6.4	4.13 (1.12)
English Language	20.2	58.6	15.2	5.1	1.0	3.92 (0.82)
Mathematics	34.7	36.6	20.8	5.9	2.0	3.96 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	37.9	34.5	17.2	10.3	0.0	4.00 (1.00)
History	43.8	35.9	15.6	4.7	0.0	4.19 (0.87)
Geography	52.8	38.9	2.8	5.6	0.0	4.39 (0.80)
Civic Education	64.1	28.2	7.7	0.0	0.0	4.56 (0.64)
Specialized Subject Matters in The Sciences						
Chemistry	27.5	52.9	19.6	0.0	0.0	4.08 (0.69)
Physics	27.3	43.6	20.0	5.5	3.6	3.86 (1.01)
Biology	42.9	38.8	10.2	8.2	0.0	4.16 (0.92)
Human Culture	60.0	23.3	13.3	3.3	0.0	4.40 (0.86)

Item IB2 17: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate positive attitudes and habits of expressing hunches and guesses in early stages of inquiry?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.2	29.6	22.2	16.0	9.9	3.38 (1.27)
Arabic Language	38.9	28.7	19.4	11.1	1.9	3.92 (1.10)
English Language	14.3	24.5	40.8	16.3	4.1	3.29 (1.04)
Mathematics	25.0	45.2	19.2	8.7	1.9	3.83 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	34.5	34.5	17.2	6.9	6.9	3.83 (1.20)
History	35.4	33.8	24.6	4.6	1.5	3.97 (0.97)
Geography	38.4	26.0	28.8	5.5	1.4	3.95 (1.01)
Civic Education	51.3	33.3	7.7	5.1	2.6	4.26 (0.99)
Specialized Subject Matters in The Sciences						
Chemistry	23.1	50.0	26.9	0.0	0.0	3.96 (0.71)
Physics	38.2	25.5	21.8	14.5	0.0	3.87 (1.09)
Biology	26.0	42.0	28.0	4.0	0.0	3.90 (0.84)
Human Culture	34.4	31.3	28.1	6.3	0.0	3.94 (0.95)

Item IB2 18: To what extent do the general objectives of the Omani Educational Curriculum: Promote a consciousness of and commitment to social problems and issues?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	32.1	25.6	15.4	15.4	1.5	3.51 (1.38)
Arabic Language	42.3	27.0	20.7	6.3	3.6	3.98 (1.10)
English Language	4.0	42.4	35.4	17.2	1.0	3.31 (0.84)
Mathematics	24.3	43.7	20.4	9.7	1.9	3.79 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	32.1	42.9	14.3	10.7	0.0	3.96 (0.96)
History	24.6	38.5	27.7	6.2	3.1	3.75 (1.00)
Geography	34.7	31.9	23.6	8.3	1.4	3.90 (1.02)
Civic Education	43.6	33.3	15.4	7.7	0.0	4.13 (0.95)
Specialized Subject Matters in The Sciences						
Chemistry	28.8	46.2	21.2	3.8	0.0	4.00 (0.82)
Physics	21.8	41.8	23.6	9.1	3.6	3.69 (1.03)
Biology	26.5	55.1	12.2	6.1	0.0	4.02 (0.80)
Human Culture	32.3	22.6	25.8	19.4	0.0	3.68 (1.14)

Item IB2 19: To what extent do the general objectives of the Omani Educational Curriculum: Cultivate the use of the imagination in conceptualizing subject matter principles?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	37.7	27.3	11.7	10.4	13.0	3.66 (1.41)
Arabic Language	44.1	30.6	17.1	7.2	0.9	4.10 (0.99)
English Language	7.1	36.4	40.4	14.1	2.0	3.32 (0.88)
Mathematics	44.9	35.5	13.1	5.6	0.9	4.18 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	34.5	34.5	24.1	6.9	0.0	3.97 (0.94)
History	38.5	36.9	9.2	12.3	3.1	3.95 (1.12)
Geography	47.9	32.9	11.0	8.2	0.0	4.21 (0.94)
Civic Education	59.0	30.8	2.6	7.7	0.0	4.41 (0.88)
Specialized Subject Matters in The Sciences						
Chemistry	43.4	32.1	24.5	0.0	0.0	4.19 (0.81)
Physics	45.5	30.9	12.7	9.1	1.8	4.09 (1.06)
Biology	34.7	38.8	22.4	4.1	0.0	4.04 (0.87)
Human Culture	40.6	25.0	25.0	9.4	0.0	3.97 (1.03)

Item IB2 20: To what extent do the general objectives of the Omani Educational Curriculum: Reflect mastery of basic terms, facts, and concepts of the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	36.2	31.3	8.7	8.7	15.0	3.65 (1.43)
Arabic Language	38.5	37.6	13.8	5.5	4.6	4.00 (1.08)
English Language	13.3	33.7	43.9	8.2	1.0	3.50 (0.87)
Mathematics	50.0	29.6	13.0	4.6	2.8	4.19 (1.02)
Specialized Subject Matters in The Arts						
General Sciences	51.7	41.4	3.4	3.4	0.0	4.41 (0.73)
History	47.6	33.3	15.9	3.2	0.0	4.25 (0.84)
Geography	56.2	30.1	9.6	2.7	1.4	4.37 (0.87)
Civic Education	55.3	23.7	15.8	5.3	0.0	4.29 (0.93)
Specialized Subject Matters in The Sciences						
Chemistry	56.6	35.8	3.8	3.8	0.0	4.45 (0.75)
Physics	39.3	37.5	17.9	3.6	1.8	4.09 (0.94)
Biology	51.0	34.7	12.2	2.0	0.0	4.35 (0.78)
Human Culture	48.4	22.6	29.0	0.0	0.0	4.19 (0.87)

Item IB2 21: To what extent do the general objectives of the Omani Educational Curriculum: Encourage an awareness and knowledge of scientific processess, mechanisms, and effects?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	50.0	18.8	10.0	8.7	12.5	3.85 (1.44)
Arabic Language	53.2	30.3	11.9	1.8	2.8	4.29 (0.95)
English Language	14.4	38.1	42.3	3.1	2.1	3.60 (0.85)
Mathematics	42.5	44.3	11.3	0.9	0.9	4.26 (0.77)
Specialized Subject Matters in The Arts						
General Sciences	53.6	35.7	3.6	7.1	0.0	4.36 (0.87)
History	58.5	35.4	1.5	3.1	1.5	4.46 (0.81)
Geography	63.0	24.7	5.5	6.8	0.0	4.44 (0.88)
Civic Education	66.7	17.9	7.7	7.7	0.0	4.44 (0.94)
Specialized Subject Matters in the Sciences						
Chemistry	44.2	44.2	11.5	0.0	0.0	4.33 (0.68)
Physics	57.1	28.6	12.5	0.0	1.8	4.39 (0.85)
Biology	56.0	36.0	6.0	2.0	0.0	4.46 (0.71)
Human Culture	46.9	31.3	18.8	3.1	0.0	4.22 (0.87)

Item IB2 22: To what extent do the general objectives of the Omani Educational Curriculum: Develop positive attitudes toward scientific knowledge and methods?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	44.3	19.0	13.9	7.6	15.2	3.70 (1.48)
Arabic Language	44.5	34.5	13.6	5.5	1.8	4.15 (0.98)
English Language	13.1	47.5	31.3	7.1	1.0	3.65 (0.84)
Mathematics	47.6	34.0	13.6	3.9	1.0	4.23 (0.90)
Specialized Subject Matters in The Arts						
General Sciences	58.6	17.2	24.1	0.0	0.0	4.35 (0.86)
History	50.8	31.7	12.7	4.8	0.0	4.29 (0.87)
Geography	61.6	20.5	12.3	5.5	0.0	4.38 (0.91)
Civic Education	63.2	18.4	15.8	2.6	0.0	4.42 (0.86)
Specialized Subject Matters in The Sciences						
Chemistry	44.2	40.4	13.5	1.9	0.0	4.27 (0.77)
Physics	50.9	38.2	9.1	1.8	0.0	4.38 (0.73)
Biology	47.9	39.6	6.3	6.3	0.0	4.29 (0.85)
Human Culture	56.3	15.6	25.0	0.0	3.1	4.22 (1.04)

Item IB2 23: To what extent do the general objectives of the Omani Educational Curriculum: Promote an ability and desire to use language correctly in writing or talking?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	61.2	12.5	2.5	5.0	18.8	3.93 (1.60)
Arabic Language	66.7	21.3	3.7	6.5	1.9	4.44 (0.97)
English Language	16.5	53.6	21.6	7.2	1.0	3.77 (0.85)
Mathematics	52.8	28.3	14.2	4.7	0.0	4.29 (0.88)
Specialized Subject Matters in The Arts						
General Sciences	57.1	35.7	7.1	0.0	0.0	4.50 (0.64)
History	64.6	23.1	6.2	3.1	3.1	4.43 (0.97)
Geography	58.9	21.9	12.3	5.5	1.4	4.32 (0.98)
Civic Education	71.1	10.5	10.5	5.3	2.6	4.42 (1.06)
Specialized Subject Matters in The Sciences						
Chemistry	50.9	45.3	3.8	0.0	0.0	4.47 (0.58)
Physics	50.9	38.2	9.1	0.0	1.8	4.36 (0.80)
Biology	45.8	43.8	8.3	2.1	0.0	4.33 (0.72)
Human Culture	51.6	32.3	12.9	3.2	0.0	4.32 (0.83)

Item IB2 24: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate an ability to relate the Omani Curriculum to everyday life?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	48.1	24.7	3.7	4.9	18.5	3.79 (1.54)
Arabic Language	57.7	26.1	7.2	7.2	1.8	4.31 (1.01)
English Language	21.4	44.9	31.6	2.0	0.0	3.86 (0.77)
Mathematics	28.3	36.8	17.9	12.3	4.7	3.72 (1.14)
Specialized Subject Matters in The Arts						
General Sciences	48.3	24.1	13.8	10.3	3.4	4.03 (1.18)
History	58.5	18.5	16.9	3.1	3.1	4.26 (1.05)
Geography	69.9	21.9	6.8	1.4	0.0	4.60 (0.68)
Civic Education	60.5	28.9	7.9	0.0	2.6	4.45 (0.86)
Specialized Subject Matters in The Sciences						
Chemistry	39.6	32.1	20.8	7.5	0.0	4.04 (0.96)
Physics	37.5	37.5	17.9	5.4	1.8	4.04 (0.97)
Biology	38.0	38.0	18.0	4.0	2.0	4.06 (0.96)
Human Culture	43.8	31.3	21.9	3.1	0.0	4.16 (0.88)

Item IB2 25: To what extent do the general objectives of the Omani Educational Curriculum: Reflect an ability and desire to apply what is learned from the Omani curriculum to one's life?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	31.3	32.5	10.8	9.6	15.7	3.54 (1.43)
Arabic Language	41.1	28.6	15.2	9.8	5.4	3.90 (1.20)
English Language	5.5	28.4	48.6	12.8	4.6	3.17 (0.89)
Mathematics	15.9	27.1	35.5	19.6	1.9	3.36 (1.03)
Specialized Subject Matters in The Arts						
General Sciences	28.6	21.4	17.9	21.4	10.7	3.36 (1.39)
History	42.2	28.1	15.6	9.4	4.7	3.94 (1.18)
Geography	46.6	27.4	15.1	9.6	1.4	4.08 (1.06)
Civic Education	41.0	35.9	12.8	10.3	0.0	4.08 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	26.4	26.4	35.8	9.4	1.9	3.66 (1.04)
Physics	16.1	37.5	33.9	8.9	3.6	3.54 (0.99)
Biology	29.4	39.2	15.7	9.8	5.9	3.77 (1.16)
Human Culture	46.7	23.3	23.3	6.7	0.0	4.10 (1.00)

Item IB2 26 a: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Memory: The recall or remembering of facts, rules, concepts, generalizations, etc.?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	31.3	25.3	18.1	18.1	7.2	3.55 (1.30)
Arabic Language	31.3	28.6	25.9	10.7	3.6	3.73 (1.12)
English Language	9.1	35.5	40.9	10.9	3.6	3.36 (0.93)
Mathematics	20.6	45.8	23.4	6.5	3.7	3.73 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	23.3	46.7	20.0	6.7	3.3	3.80 (1.00)
History	33.8	41.5	16.9	6.2	1.5	4.00 (0.95)
Geography	34.7	29.2	22.2	12.5	1.4	3.83 (1.09)
Civic Education	43.6	25.6	20.5	7.7	2.6	4.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	23.6	58.2	14.5	3.6	0.0	4.02 (0.73)
Physics	27.3	49.1	16.4	5.5	1.8	3.95 (0.91)
Biology	24.1	33.3	37.0	5.6	0.0	3.76 (0.89)
Human Culture	38.7	22.6	29.0	9.7	0.0	3.90 (1.04)

Item IB2 26 b: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Comprehension: Understanding what is being communicated but not necessarily relating it to other things?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.5	27.4	21.4	19.0	16.7	3.06 (1.33)
Arabic Language	19.5	24.8	25.7	16.8	13.3	3.20 (1.30)
English Language	7.1	41.1	33.9	8.9	8.9	3.29 (1.04)
Mathematics	10.5	42.9	27.6	14.3	4.8	3.40 (1.02)
Specialized Subject Matters in The Arts						
General Sciences	13.8	27.6	24.1	20.7	13.8	3.07 (1.28)
History	14.8	39.3	14.8	18.0	13.1	3.25 (1.29)
Geography	15.5	23.9	22.5	22.5	15.5	3.01 (1.32)
Civic Education	22.5	30.0	15.0	25.0	7.5	3.35 (1.29)
Specialized Subject Matters in The Sciences						
Chemistry	1.8	43.6	29.1	18.2	7.3	3.15 (0.99)
Physics	10.5	29.8	28.1	17.5	14.0	3.05 (1.22)
Biology	13.0	44.4	16.7	16.7	9.3	3.35 (1.18)
Human Culture	12.1	36.4	24.2	12.1	15.2	3.18 (1.26)

Item IB2 26 c: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Application: Using knowledge, methods, theories, etc., in new situations (to solve problems, for example)?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	39.5	16.3	18.6	12.8	12.8	3.57 (1.44)
Arabic Language	27.7	27.7	24.1	17.9	2.7	3.60 (1.15)
English Language	7.1	26.8	42.9	17.0	6.3	3.12 (0.98)
Mathematics	22.7	31.8	25.5	18.2	1.8	3.56 (1.09)
Specialized Subject Matters in The Arts						
General Sciences	24.1	37.9	13.8	13.8	10.3	3.52 (1.30)
History	25.0	37.5	20.3	14.1	3.1	3.67 (1.10)
Geography	33.3	40.3	13.9	12.5	0.0	3.94 (0.99)
Civic Education	37.5	32.5	20.0	10.0	0.0	3.98 (1.00)
Specialized Subject Matters in The Sciences						
Chemistry	16.4	40.0	25.5	16.4	1.8	3.53 (1.02)
Physics	19.6	42.9	25.0	5.4	7.1	3.63 (1.09)
Biology	20.4	40.7	29.6	5.6	3.7	3.69 (0.99)
Human Culture	32.3	32.3	25.8	9.7	0.0	3.87 (0.99)

Item IB2 26 d: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Analysis: Breaking something down into its component parts and understanding the inter-relationship of the parts?

	Fully / Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	32.9	22.4	16.5	11.8	16.5	3.44 (1.47)
Arabic Language	44.6	32.1	9.8	6.3	7.1	4.01 (1.20)
English Language	4.5	14.3	44.6	23.2	13.4	2.73 (1.01)
Mathematics	17.6	34.3	25.9	13.9	8.3	3.39 (1.18)
Specialized Subject Matters in The Arts						
General Sciences	37.0	18.5	18.5	11.1	14.8	3.52 (1.48)
History	36.5	27.0	22.2	14.3	0.0	3.86 (1.08)
Geography	50.7	28.8	12.3	6.8	1.4	4.21 (1.00)
Civic Education	50.0	22.5	15.0	7.5	5.0	4.05 (1.20)
Specialized Subject Matters in The Sciences						
Chemistry	27.3	43.6	16.4	9.1	3.6	3.82 (1.06)
Physics	28.6	32.1	17.9	19.6	1.8	3.66 (1.15)
Biology	29.6	24.1	31.5	13.0	1.9	3.67 (1.10)
Human Culture	36.4	18.2	30.3	9.1	6.1	3.70 (1.24)

Item IB2 26 e: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Synthesis: Putting things together to form a new entity such as a new idea, hypothesis, or set of relationships?

	Fully / Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	33.3	22.6	19.0	10.7	14.3	3.50 (1.42)
Arabic Language	44.3	30.4	10.4	11.3	3.5	4.01 (1.15)
English Language	3.7	18.3	41.3	21.1	15.6	2.73 (1.05)
Mathematics	22.0	33.9	20.2	17.4	6.4	3.48 (1.20)
Specialized Subject Matters in The Arts						
General Sciences	25.9	37.0	14.8	14.8	7.4	3.59 (1.25)
History	34.4	34.4	20.3	9.4	1.6	3.91 (1.04)
Geography	49.3	32.4	9.9	5.6	2.8	4.20 (1.02)
Civic Education	52.5	25.0	10.0	12.5	0.0	4.18 (1.06)
Specialized Subject Matters in The Sciences						
Chemistry	14.5	47.3	27.3	7.3	3.6	3.62 (0.95)
Physics	24.6	38.6	22.8	8.8	5.3	3.68 (1.11)
Biology	31.5	31.5	18.5	13.0	5.6	3.70 (1.21)
Human Culture	38.7	22.6	22.6	16.1	0.0	3.84 (1.13)

Item IB2 26 f: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Evaluation: Making quantitative and qualitative judgements based on stated standards or criteria?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	24.1	32.5	15.7	18.1	9.6	3.43 (1.30)
Arabic Language	36.3	28.3	23.9	8.8	2.7	3.87 (1.09)
English Language	3.7	17.4	42.2	27.5	9.2	2.79 (0.96)
Mathematics	12.7	36.3	31.4	14.7	4.9	3.37 (1.04)
Specialized Subject Matters in The Arts						
General Sciences	18.5	29.6	25.9	18.5	7.4	3.33 (1.21)
History	40.3	30.6	21.0	8.1	0.0	4.03 (0.98)
Geography	33.3	41.7	9.7	11.1	4.2	3.89 (1.12)
Civic Education	37.5	25.0	22.5	12.5	2.5	3.83 (1.15)
Specialized Subject Matters in The Sciences						
Chemistry	16.4	47.3	21.8	9.1	5.5	3.60 (1.05)
Physics	26.8	25.0	37.5	10.7	0.0	3.68 (0.99)
Biology	32.1	34.0	20.8	9.4	3.8	3.81 (1.10)
Human Culture	38.7	29.0	22.6	6.5	3.2	3.94 (1.09)

Item IB2 27: To what extent do the general objectives of the Omani Educational Curriculum: Develop knowledge of facts, concepts, and generalizations which make up the various subject matter of the Omani Educational Curriculum?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	34.6	25.6	23.1	6.4	10.3	3.68 (1.29)
Arabic Language	36.4	40.9	11.8	7.3	3.6	3.99 (1.05)
English Language	9.4	45.8	36.5	8.3	0.0	3.56 (0.78)
Mathematics	26.0	40.0	22.0	11.0	1.0	3.79 (0.99)
Specialized Subject Matters in The Arts						
General Sciences	31.0	31.0	27.6	10.3	0.0	3.83 (1.00)
History	35.4	47.7	13.8	1.5	1.5	4.14 (0.83)
Geography	56.2	30.1	13.7	0.0	0.0	4.43 (0.73)
Civic Education	55.3	36.8	7.9	0.0	0.0	4.47 (0.65)
Specialized Subject Matters in The Sciences						
Chemistry	20.8	58.5	17.0	1.9	1.9	3.94 (0.80)
Physics	35.7	41.1	17.9	3.6	1.8	4.05 (0.92)
Biology	39.6	37.5	20.8	2.1	0.0	4.15 (0.83)
Human Culture	37.5	46.9	12.5	0.0	3.1	4.16 (0.88)

Item IB2 28: To what extent is there evidence attention is being given to coordination and integration of the Omani Educational Curriculum among the various subject matters?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.4	29.4	24.7	15.3	8.2	3.42 (1.23)
Arabic Language	21.9	29.8	28.9	10.5	8.8	3.46 (1.20)
English Language	2.7	37.3	37.3	18.2	4.5	3.16 (0.91)
Mathematics	9.1	33.6	39.1	14.5	3.6	3.30 (0.95)
Specialized Subject Matters in The Arts						
General Sciences	16.7	43.3	30.0	10.0	0.0	3.67 (0.88)
History	19.7	42.6	19.7	16.4	1.6	3.62 (1.04)
Geography	26.0	41.1	17.8	15.1	0.0	3.78 (1.00)
Civic Education	35.9	38.5	17.9	5.1	2.6	4.00 (1.00)
Specialized Subject Matters in The Sciences						
Chemistry	7.3	41.8	45.5	5.5	0.0	3.51 (0.72)
Physics	10.5	28.1	47.4	12.3	1.8	3.33 (0.89)
Biology	17.6	43.1	31.4	3.9	3.9	3.67 (0.95)
Human Culture	15.2	48.5	21.2	15.2	0.0	3.64 (0.93)

Item IB2 29: To what extent efforts are made to follow up the progress of students (from 1st to 3rd grade), to determine that the sequencing and content of the subject matter is meeting the needs of the Omani student?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	24.1	39.2	17.7	11.4	7.6	3.61 (1.19)
Arabic Language	21.6	34.2	19.8	17.1	7.2	3.46 (1.21)
English Language	8.2	46.9	34.7	8.2	2.0	3.51 (0.84)
Mathematics	14.0	45.8	26.2	12.1	1.9	3.58 (0.94)
Specialized Subject Matters in The Arts						
General Sciences	17.9	42.9	21.4	14.3	3.6	3.57 (1.07)
History	16.4	45.9	16.4	16.4	4.9	3.53 (1.11)
Geography	34.7	31.9	19.4	13.9	0.0	3.88 (1.05)
Civic Education	39.5	34.2	5.3	15.8	5.3	3.87 (1.26)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	43.4	39.6	1.9	0.0	3.72 (0.74)
Physics	14.5	38.2	32.7	12.7	1.8	3.51 (0.96)
Biology	36.0	34.0	22.0	8.0	0.0	3.98 (0.96)
Human Culture	32.3	38.7	16.1	12.9	0.0	3.90 (1.01)

Item IB2 30: To what extent has the Ministry of Education demonstrated responsibility for facilitating the Omani Educational Curriculum, through recognition that specific facilities and equipment, as well as properly trained teachers, are needed?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	32.5	28.7	17.5	12.5	8.7	3.64 (1.30)
Arabic Language	36.0	25.2	21.6	11.7	5.4	3.75 (1.22)
English Language	28.1	51.0	18.8	2.1	0.0	4.05 (0.75)
Mathematics	25.5	42.2	18.6	9.8	3.9	3.76 (1.07)
Specialized Subject Matters in The Arts						
General Sciences	28.6	35.7	25.0	10.7	0.0	3.82 (0.98)
History	29.2	44.6	7.7	13.8	4.6	3.80 (1.15)
Geography	30.1	31.5	19.2	16.4	2.7	3.70 (1.15)
Civic Education	41.0	35.9	12.8	10.3	0.0	4.08 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	17.3	53.8	25.0	3.8	0.0	3.85 (0.75)
Physics	25.0	39.3	26.8	7.1	1.8	3.79 (0.97)
Biology	36.0	32.0	24.0	8.0	0.0	3.96 (0.97)
Human Culture	26.7	43.3	16.7	10.0	3.3	3.80 (1.06)

Item IB2 31: To what extent does the Omani Educational Curriculum emphasize the affective aspects of the subject matter (eg. values, attitudes, etc.)?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	38.3	27.2	11.1	14.8	8.6	3.72 (1.34)
Arabic Language	41.4	27.9	21.6	6.3	2.7	3.99 (1.07)
English Language	1.0	38.4	43.4	16.2	1.0	3.22 (0.76)
Mathematics	17.1	38.1	31.4	11.4	1.9	3.57 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	20.7	31.0	31.0	6.9	10.3	3.45 (1.21)
History	33.8	35.4	24.6	4.6	1.5	3.95 (0.96)
Geography	32.9	45.2	11.0	11.0	0.0	4.00 (0.94)
Civic Education	43.6	38.5	15.4	2.6	0.0	4.23 (0.81)
Specialized Subject Matters in The Sciences						
Chemistry	7.7	36.5	51.9	3.8	0.0	3.48 (0.70)
Physics	14.3	35.7	28.6	14.3	7.1	3.36 (1.12)
Biology	14.0	46.0	26.0	10.0	4.0	3.56 (0.99)
Human Culture	36.7	40.0	16.7	6.7	0.0	4.07 (0.91)

Part I Section B: Part 2
Omani Educational Objectives
(Supervisor)

Item IB2 1: To what extent do the general objectives of the Omani Educational Curriculum: Develop a loyalty to the Omani society?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	8.3	8.3	83.3	1.25 (0.62)
Arabic Language	68.8	18.8	0.0	6.3	6.3	4.38 (1.20)
English Language	27.8	22.2	38.9	5.6	5.6	3.61 (1.15)
Mathematics	44.4	22.2	33.3	0.0	0.0	4.11 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	57.1	28.6	0.0	14.3	0.0	4.29 (1.11)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IB2 2: To what extent do the general objectives of the Omani Educational Curriculum: Develop and encourage desirable societial behavior?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	16.7	25.0	50.0	1.83 (1.03)
Arabic Language	37.5	43.8	18.8	0.0	0.0	4.19 (0.75)
English Language	5.3	15.8	52.6	15.8	10.5	2.90 (0.99)
Mathematics	11.1	33.3	44.4	0.0	11.1	3.33 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	50.0	0.0	25.0	25.0	0.0	3.75 (1.50)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	14.3	14.3	71.4	0.0	0.0	3.43 (0.79)
Civic Education	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB2 3: To what extent do the general objectives of the Omani Educational Curriculum: Promote awareness and encourage fulfillment of civic responsibilities?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	25.0	41.7	25.0	2.25 (1.14)
Arabic Language	18.8	43.8	37.5	0.0	0.0	3.81 (0.75)
English Language	33.3	22.2	33.3	11.1	0.0	3.78 (1.06)
Mathematics	0.0	44.4	33.3	11.1	11.1	3.11 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
History	12.5	62.5	25.0	0.0	0.0	3.88 (0.64)
Geography	0.0	42.9	57.1	0.0	0.0	3.43 (0.54)
Civic Education	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IB2 4: To what extent do the general objectives of the Omani Educational Curriculum: Develop and encourage desirable scientific and social views?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	8.3	50.0	33.3	2.00 (1.13)
Arabic Language	50.0	25.0	6.3	12.5	6.3	4.00 (1.32)
English Language	27.8	33.3	38.9	0.0	0.0	3.89 (0.83)
Mathematics	22.2	66.7	0.0	0.0	11.1	3.89 (1.17)
Subject Specialized Sciences in The Arts						
General Sciences	40.0	60.0	0.0	0.0	0.0	4.40 (0.55)
History	25.0	62.5	12.5	0.0	0.0	4.13 (0.64)
Geography	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
Civic Education	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)

Item IB2 5: To what extent do the general objectives of the Omani Educational Curriculum: Promote an awareness that learning is a life-long process and continues through-out individual's lifetime?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	9.1	27.3	63.6	1.46 (0.69)
Arabic Language	68.8	18.8	0.0	0.0	12.5	4.31 (1.35)
English Language	36.8	21.1	15.8	21.1	5.3	3.63 (1.34)
Mathematics	44.4	44.4	11.1	0.0	0.0	4.33 (0.71)
Specialized Subject Matters in The Arts						
General Sciences	40.0	60.0	0.0	0.0	0.0	4.40 (0.55)
History	75.0	25.0	0.0	0.0	0.0	4.75 (0.46)
Geography	71.4	14.3	14.3	0.0	0.0	4.57 (0.79)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB2 6: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate the capacity to experience multiple loyalties (eg. family, country, religion, culture) and identities?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	10.0	10.0	0.0	80.0	1.50 (1.08)
Arabic Language	50.0	18.8	18.8	12.5	0.0	4.06 (1.12)
English Language	5.3	26.3	26.3	36.8	5.3	2.90 (1.05)
Mathematics	44.4	33.3	11.1	11.1	0.0	4.11 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
History	75.0	25.0	0.0	0.0	0.0	4.75 (0.46)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IB2 7: To what extent do the general objectives of the Omani Educational Curriculum: Promote an appreciation for the diversity in human behavior, beliefs, and customs?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	41.7	16.7	33.3	2.25 (1.06)
Arabic Language	62.5	12.5	18.8	0.0	6.3	4.25 (1.18)
English Language	10.5	36.8	31.6	21.1	0.0	3.37 (0.96)
Mathematics	33.3	22.2	33.3	11.1	0.0	3.78 (1.09)
Specialized Subject Matters in The Arts						
General Sciences	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
History	75.0	25.0	0.0	0.0	0.0	4.75 (0.46)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB2 8: To what extent do the general objectives of the Omani Educational Curriculum: Develop the capacity for independent study, for continuing learning outside of the classroom?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	25.0	25.0	41.7	2.00 (1.04)
Arabic Language	31.3	37.5	18.8	6.3	6.3	3.81 (1.17)
English Language	22.2	5.6	27.8	33.3	11.1	2.94 (1.35)
Mathematics	22.2	22.2	33.3	11.1	11.1	3.33 (1.32)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
Civic Education	33.3	33.3	16.7	16.7	0.0	3.83 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB2 9: To what extent do the general objectives of the Omani Educational Curriculum: Promote a positive attitude toward learning and inquiry?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	9.1	27.3	27.3	36.4	2.09 (1.04)
Arabic Language	56.3	25.0	6.3	0.0	12.5	4.13 (1.36)
English Language	38.9	27.8	16.7	5.6	11.1	3.78 (1.35)
Mathematics	11.1	88.9	0.0	0.0	0.0	4.11 (0.33)
Specialized Subject Matters in The Arts						
General Sciences	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
History	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB2 10: To what extent do the general objectives of the Omani Educational Curriculum: The Curriculum should reflect skills in analyzing issues and problems?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	8.3	8.3	41.7	33.3	2.17 (1.27)
Arabic Language	62.5	18.8	6.3	0.0	12.5	4.19 (1.38)
English Language	21.1	21.1	31.6	15.8	10.5	3.26 (1.28)
Mathematics	33.3	22.2	44.4	0.0	0.0	3.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Specialized Subject Matters in The Sciences						
Chemistry	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IB2 11: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate critical thinking skills, such as skills in structuring pertinent questions, or gathering and organizing data, and making generalizations, etc.?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	33.3	50.0	1.67 (0.78)
Arabic Language	43.6	31.3	12.5	6.3	6.3	4.00 (1.21)
English Language	21.1	26.3	36.8	5.3	10.5	3.42 (1.22)
Mathematics	22.2	33.3	33.3	0.0	11.1	3.56 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
Civic Education	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IB2 12: To what extent do the general objectives of the Omani Educational Curriculum: Develop the ability to judge the validity of evidence and draw sound conclusions from data?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	8.3	50.0	25.0	2.17 (1.03)
Arabic Language	25.0	56.3	18.8	0.0	0.0	4.06 (0.68)
English Language	0.0	21.1	47.4	31.6	0.0	2.90 (0.74)
Mathematics	11.1	11.1	55.6	11.1	11.1	3.00 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	25.0	25.0	50.0	0.0	0.0	3.75 (0.89)
Geography	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IB2 13: To what extent do the general objectives of the Omani Educational Curriculum: Promote a capacity to recognize and tolerate complexity and ambiguity?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	0.0	25.0	58.3	1.75 (1.14)
Arabic Language	50.0	25.0	18.8	0.0	6.3	4.13 (1.15)
English Language	0.0	42.1	31.6	10.5	15.8	3.00 (1.11)
Mathematics	22.2	44.4	22.2	11.1	0.0	3.78 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	71.4	14.3	14.3	0.0	0.0	4.57 (0.79)
Civic Education	66.7	0.0	16.7	16.7	0.0	4.17 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Item IB2 14: To the extent that there is evidence of long-range goals of the Omani Educational Curriculum and considering the nature and importance of the history, philosophy, and the lives of Arabic and Islamic scholars as major cultural influences?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	41.7	33.3	25.0	2.17 (0.84)
Arabic Language	25.0	56.3	12.5	6.3	0.0	4.00 (0.82)
English Language	22.2	16.7	33.3	22.2	5.6	3.28 (1.23)
Mathematics	11.1	0.0	55.6	22.2	11.1	2.78 (1.09)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	75.0	25.0	0.0	0.0	0.0	4.75 (0.46)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB2 15: To what extent do the general objectives of the Omani Educational Curriculum: Develop knowledge of facts and concepts that are basic to an understanding of the Omani cultural heritage?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	41.7	50.0	1.58 (0.67)
Arabic Language	37.5	43.8	6.3	6.3	6.3	4.00 (1.16)
English Language	22.2	22.2	27.8	27.8	0.0	3.39 (1.15)
Mathematics	11.1	55.6	22.2	11.1	0.0	3.67 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	0.0	80.0	20.0	0.0	0.0	3.80 (0.45)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	57.1	14.3	28.6	0.0	0.0	4.29 (0.95)
Civic Education	50.0	16.7	0.0	33.3	0.0	3.83 (1.47)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
Physics	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IB2 16: To what extent do the general objectives of the Omani Educational Curriculum: Encourage the ability to work together cooperatively on group projects?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	33.3	50.0	1.67 (0.78)
Arabic Language	25.0	50.0	12.5	6.3	6.3	3.81 (1.11)
English Language	22.2	22.2	33.3	16.7	5.6	3.39 (1.20)
Mathematics	11.1	33.3	55.6	0.0	0.0	3.56 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	40.0	0.0	0.0	3.40 (1.14)
History	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IB2 17: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate positive attitudes and habits of expressing hunches and guesses in early stages of inquiry?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	33.3	25.0	33.3	2.17 (1.03)
Arabic Language	18.8	62.5	12.5	6.3	0.0	3.94 (0.77)
English Language	27.8	22.2	27.8	11.1	11.1	3.44 (1.34)
Mathematics	22.2	33.3	33.3	0.0	11.1	3.56 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	40.0	0.0	60.0	0.0	0.0	3.80 (1.10)
History	25.0	12.5	62.5	0.0	0.0	3.63 (0.92)
Geography	14.3	28.6	42.9	14.3	0.0	3.43 (0.98)
Civic Education	16.7	0.0	66.7	16.7	0.0	3.17 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Item IB2 18: To what extent do the general objectives of the Omani Educational Curriculum: Promote a consciousness of and commitment to social problems and issues?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	16.7	16.7	58.3	1.75 (1.06)
Arabic Language	25.0	43.8	25.0	6.3	0.0	3.88 (0.89)
English Language	11.1	11.1	44.4	11.1	22.2	2.78 (1.26)
Mathematics	11.1	44.4	33.3	0.0	11.1	3.44 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	20.0	0.0	80.0	0.0	0.0	3.40 (0.89)
History	37.5	25.0	25.0	0.0	12.5	3.75 (1.39)
Geography	0.0	57.1	28.6	0.0	14.3	3.29 (1.11)
Civic Education	0.0	33.3	50.0	0.0	16.7	3.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB2 19: To what extent do the general objectives of the Omani Educational Curriculum: Cultivate the use of the imagination in conceptualizing subject matter principles?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	16.7	58.3	1.67 (0.89)
Arabic Language	25.0	37.5	18.8	12.5	6.3	3.63 (1.20)
English Language	5.9	41.2	29.4	17.6	5.9	3.24 (1.03)
Mathematics	22.2	33.3	33.3	0.0	11.1	3.56 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
Civic Education	50.0	0.0	33.3	16.7	0.0	3.83 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IB2 20: To what extent do the general objectives of the Omani Educational Curriculum: Reflect mastery of basic terms, facts, and concepts of the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	8.3	8.3	33.3	41.7	2.08 (1.31)
Arabic Language	37.5	37.5	6.3	12.5	6.3	3.88 (1.26)
English Language	11.1	44.4	22.2	22.2	0.0	3.44 (0.98)
Mathematics	33.3	33.3	22.2	0.0	11.1	3.78 (1.30)
Specialized Subject Matters in The Arts						
General Sciences	40.0	60.0	0.0	0.0	0.0	4.40 (0.55)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	28.6	57.1	14.3	0.0	0.0	4.14 (0.69)
Civic Education	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

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Item IB2 21: To what extent do the general objectives of the Omani Educational Curriculum: Encourage an awareness and knowledge of scientific processess, mechanisms, and effects?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	0.0	33.3	66.7	1.33 (0.49)
Arabic Language	46.7	33.3	6.7	6.7	6.7	4.07 (1.22)
English Language	22.2	27.8	44.4	0.0	5.6	3.61 (1.04)
Mathematics	22.2	55.6	11.1	11.1	0.0	3.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
History	50.0	37.5	12.5	0.0	0.0	4.38 (0.74)
Geography	71.4	0.0	28.6	0.0	0.0	4.43 (0.98)
Civic Education	66.7	0.0	16.7	16.7	0.0	4.17 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB2 22: To what extent do the general objectives of the Omani Educational Curriculum: Develop positive attitudes toward scientific knowledge and methods?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	8.3	50.0	41.7	1.67 (0.65)
Arabic Language	37.5	37.5	12.5	12.5	0.0	4.00 (1.03)
English Language	22.2	38.9	38.9	0.0	0.0	3.83 (0.79)
Mathematics	44.4	33.3	11.1	11.1	0.0	4.11 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	60.0	40.0	0.0	0.0	0.0	4.60 (0.55)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	57.1	14.3	14.3	14.3	0.0	4.14 (1.22)
Civic Education	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IB2 23: To what extent do the general objectives of the Omani Educational Curriculum: Promote an ability and desire to use language correctly in writing or talking?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	25.0	66.7	1.42 (0.67)
Arabic Language	62.5	18.8	6.3	0.0	12.5	4.19 (1.38)
English Language	33.3	22.2	27.8	16.7	0.0	3.72 (1.13)
Mathematics	22.2	22.2	44.4	0.0	11.1	3.44 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
History	37.5	62.5	0.0	0.0	0.0	4.38 (0.52)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	50.0	16.7	16.7	16.7	0.0	4.00 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IB2 24: To what extent do the general objectives of the Omani Educational Curriculum: Facilitate an ability to relate the Omani Curriculum to everyday life?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	0.0	25.0	66.7	1.50 (0.91)
Arabic Language	50.0	37.5	0.0	6.3	6.3	4.19 (1.17)
English Language	16.7	33.3	33.3	11.1	5.6	3.44 (1.10)
Mathematics	11.1	33.3	22.2	22.2	11.1	3.11 (1.27)
Specialized Subject Matters in The Arts						
General Sciences	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IB2 25: To what extent do the general objectives of the Omani Educational Curriculum: Reflect an ability and desire to apply what is learned from the Omani curriculum to one's life?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	41.7	50.0	1.58 (0.67)
Arabic Language	12.5	43.8	37.5	6.3	0.0	3.63 (0.81)
English Language	10.5	15.8	31.6	31.6	10.5	2.84 (1.17)
Mathematics	0.0	55.6	33.3	0.0	11.1	3.33 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	40.0	20.0	0.0	3.40 (1.14)
History	50.0	12.5	25.0	0.0	12.5	3.88 (1.46)
Geography	28.6	14.3	28.6	28.6	0.0	3.43 (1.27)
Civic Education	16.7	0.0	66.7	16.7	0.0	3.17 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Item IB2 26 a: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Memory: The recall or remembering of facts rules, concepts, generalizations, etc.?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	25.0	58.3	1.58 (0.79)
Arabic Language	18.8	37.5	31.3	12.5	0.0	3.63 (0.96)
English Language	5.3	21.1	42.1	31.6	0.0	3.00 (0.88)
Mathematics	0.0	77.8	11.1	0.0	11.1	3.56 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	50.0	0.0	25.0	0.0	3.75 (1.26)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IB2 26 b: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Comprehension: Understanding what is being communicated but not necessarily relating it to other things?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	16.7	50.0	25.0	2.17 (1.12)
Arabic Language	6.3	50.0	37.5	6.3	0.0	3.56 (0.73)
English Language	5.3	42.1	15.8	31.6	5.3	3.11 (1.10)
Mathematics	0.0	55.6	22.2	11.1	11.1	3.22 (1.09)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	16.7	0.0	16.7	3.50 (1.38)
History	25.0	12.5	50.0	0.0	12.5	3.38 (1.30)
Geography	0.0	28.6	57.1	0.0	14.3	3.00 (1.00)
Civic Education	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB2 26 c: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Application: Using knowledge, methods, theories, etc., in new situations (to solve problems, for example)?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	25.0	50.0	16.7	2.25 (0.87)
Arabic Language	25.0	6.3	12.5	6.3	0.0	4.00 (0.82)
English Language	5.6	16.7	27.8	38.9	11.1	2.67 (1.09)
Mathematics	0.0	44.4	33.3	11.1	11.1	3.11 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	20.0	40.0	0.0	3.20 (1.30)
History	25.0	37.5	25.0	0.0	12.5	3.63 (1.30)
Geography	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
Civic Education	0.0	33.3	50.0	0.0	16.7	3.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IB2 26 d: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Analysis: Breaking something down into its component parts and understanding the inter-relationship of the parts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	16.7	33.3	33.3	2.17 (1.12)
Arabic Language	18.8	31.3	37.5	12.5	0.0	3.56 (0.96)
English Language	0.0	10.5	36.8	42.1	10.5	2.47 (0.84)
Mathematics	22.2	22.2	44.4	11.1	0.0	3.56 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	12.5	62.5	12.5	0.0	12.5	3.63 (1.19)
Geography	14.3	28.6	42.9	0.0	14.3	3.29 (1.25)
Civic Education	0.0	16.7	66.7	0.0	16.7	2.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IB2 26 e: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Synthesis: Putting things together to form a new entity such as a new idea, hypothesis, or set of relationships?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	33.3	33.3	25.0	2.25 (0.97)
Arabic Language	31.3	50.0	12.5	6.3	0.0	4.06 (0.85)
English Language	0.0	26.3	31.6	36.8	5.3	2.79 (0.92)
Mathematics	12.5	50.0	25.0	12.5	0.0	3.63 (0.92)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	20.0	20.0	0.0	3.60 (1.14)
History	12.5	50.0	25.0	0.0	12.5	3.50 (1.20)
Geography	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
Civic Education	0.0	33.3	50.0	0.0	16.7	3.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB2 26 f: In general, to what extent does the Omani Educational Curriculum especially aim to develop student achievement on each of the following cognitive levels?

Evaluation: Making quantitative and qualitative judgements based on stated standards or criteria?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	16.7	33.3	16.7	33.3	2.33 (1.16)
Arabic Language	31.3	31.3	31.3	6.3	0.0	3.88 (0.96)
English Language	0.0	10.5	31.6	36.8	21.1	2.32 (0.95)
Mathematics	11.1	44.4	33.3	11.1	0.0	3.56 (0.88)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	37.5	37.5	12.5	0.0	12.5	3.88 (1.36)
Geography	28.6	28.6	28.6	0.0	14.3	3.57 (1.40)
Civic Education	16.7	33.3	16.7	16.7	16.7	3.17 (1.47)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IB2 27: To what extent do the general objectives of the Omani Educational Curriculum: Develop knowledge of facts, concepts, and generalizations which make up the various subject matter of the Omani Educational Curriculum?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	16.7	50.0	25.0	2.08 (0.90)
Arabic Language	50.0	25.0	12.5	6.3	6.3	4.06 (1.24)
English Language	5.6	33.3	33.3	27.8	0.0	3.17 (0.92)
Mathematics	11.1	55.6	11.1	22.2	0.0	3.56 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	28.6	57.1	14.3	0.0	0.0	4.14 (0.69)
Civic Education	33.3	50.0	0.0	16.7	0.0	4.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IB2 28: To what extent is there evidence attention is being given to coordination and integration of the Omani Educational Curriculum among the various subject matters?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	16.7	25.0	41.7	2.08 (1.17)
Arabic Language	25.0	50.0	25.0	0.0	0.0	4.00 (0.73)
English Language	0.0	10.5	36.8	47.4	5.3	2.53 (0.77)
Mathematics	0.0	22.2	55.6	11.1	11.1	2.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	16.7	0.0	83.3	0.0	0.0	3.33 (0.82)
History	25.0	12.5	50.0	0.0	12.5	3.38 (1.30)
Geography	0.0	42.9	42.9	0.0	14.3	3.14 (1.07)
Civic Education	16.7	33.3	33.3	0.0	16.7	3.33 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Physics	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IB2 29: To what extent efforts are made to follow up the progress of students (from 1st to 3rd grade), to determine that the sequencing and content of the subject matter is meeting the needs of the Omani student?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	25.0	58.3	8.3	2.42 (1.00)
Arabic Language	18.8	50.0	25.0	6.3	0.0	3.81 (0.83)
English Language	0.0	33.3	44.4	22.2	0.0	3.11 (0.76)
Mathematics	0.0	44.4	33.3	11.1	11.1	3.11 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
History	12.5	37.5	25.0	12.5	12.5	3.25 (1.28)
Geography	0.0	42.9	42.9	0.0	14.3	3.14 (1.07)
Civic Education	0.0	33.3	33.3	16.7	16.7	2.83 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IB2 30: To what extent has the Ministry of Education demonstrated responsibility for facilitating the Omani Educational Curriculum, through recognition that specific facilities and equipment, as well as properly trained teachers, are needed?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	33.3	41.7	1.92 (1.00)
Arabic Language	37.5	31.3	25.0	6.3	0.0	4.00 (0.97)
English Language	27.8	50.0	11.1	11.1	0.0	3.94 (0.94)
Mathematics	0.0	87.5	0.0	0.0	12.5	3.63 (1.06)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	12.5	62.5	25.0	0.0	0.0	3.88 (0.64)
Geography	0.0	42.9	57.1	0.0	0.0	3.43 (0.54)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IB2 31: To what extent does the Omani Educational Curriculum emphasize the affective aspects of the subject matter (eg. values, attitudes, etc.)?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	8.3	75.0	1.42 (0.79)
Arabic Language	25.0	43.8	31.3	0.0	0.0	3.94 (0.77)
English Language	0.0	22.2	50.0	22.2	5.6	2.89 (0.83)
Mathematics	0.0	55.6	33.3	11.1	0.0	3.44 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
Geography	0.0	57.1	42.9	0.0	0.0	3.57 (0.54)
Civic Education	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Part I Section B: Part 2
Omani Educational Objectives
(Administrator)

Item IB2	Response*					
To what extent do the general objectives of the Omani Educational Curriculum:	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. Develop a loyalty to the Omani Society?	79.7	16.2	2.7	0.0	1.4	4.73 (0.65)
2. Develop and encourage desirable societial behavior?	36.0	44.0	13.3	5.3	1.3	4.08 (0.91)
3. Promote awareness and encourage fulfillment of civic responsibilities?	17.3	49.3	26.7	4.0	2.7	3.75 (0.89)
4. Develop and encourage desirable scientific and social views?	39.2	47.3	9.5	2.7	1.4	4.20 (0.83)
5. Promote an awareness that learning is a life-long process and continues throughout an individual's life time?	80.0	13.3	4.0	1.3	1.3	4.69 (0.74)
6. Facilitate the capacity to experience multiple loyalties (eg. family, country, religion, culture) and identities?	65.3	26.7	5.3	2.7	0.0	4.55 (0.72)
7. Promote an appreciation for the diversity in human behavior, beliefs, and customs?	37.8	43.2	17.6	1.4	0.0	4.18 (0.77)
8. Develop the capacity for independent study for continuing learning outside of the classroom?	25.3	49.3	17.3	8.0	0.0	3.92 (0.87)
9. Promote a positive attitude toward learning and inquiry?	60.0	30.7	4.0	5.3	0.0	4.45 (0.81)
10. The Curriculum should reflect skills in analyzing issues and problems?	48.0	26.7	21.3	4.0	0.0	4.19 (0.91)
11. Facilitate critical thinking skills, such as skills in structuring pertinent questions, or gathering and organizing data, and making generalizations, etc.?	39.7	31.5	21.9	5.5	1.4	4.03 (0.99)
12. Develop the ability to judge the validity of evidence and draw sound conclusions from data?	17.3	46.7	24.0	12.0	0.0	3.69 (0.90)
13. Promote a capacity to recognize and tolerate complexity and ambiquity?	43.2	39.2	14.9	2.7	0.0	4.23 (0.80)
14. To what extent is there evidence that the long-range goals of the Omani Educational Curriculum consider the nature and importance of the history, philosophy, and the lives of Arabic and Islamic scholars as major cultural influences?	21.3	56.0	18.7	2.7	1.3	3.93 (0.79)
15. Develop knowledge of facts and concepts that are basic to the understanding of the Omani cultural heritage?	51.4	36.5	9.5	2.7	0.0	4.37 (0.77)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IB2	Response*					
To what extent do the general objectives of the Omani Educational Curriculum:	5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. Encourage the ability to work together cooperatively on group projects?	37.3	46.7	12.0	4.0	0.0	4.17 (0.80)
17. Facilitate positive attitudes and habits of expressing hunches and guesses in early stages of inquiry?	29.3	41.3	21.3	6.7	1.3	3.91 (0.95)
18. Promote a consciousness of and commitment to scientific problems and issues?	13.5	54.1	27.0	5.4	0.0	3.76 (0.76)
19. Cultivate the use of the imagination in conceptualizing subject matter principles?	24.3	44.6	24.3	6.8	0.0	3.87 (0.87)
20. Reflect mastery of basic terms, facts, and concepts of the subject matter?	37.8	44.6	16.2	1.4	0.0	4.19 (0.75)
21. Encourage an awareness and knowledge of scientific processes, mechanisms, and effects?	45.3	42.7	9.3	2.7	0.0	4.31 (0.75)
22. Develop positive attitues toward scientific knowledge and methods?	61.3	29.3	5.3	2.7	1.3	4.47 (0.83)
23. Promote an ability and desire to use language correctly in writting or talking?	52.0	30.7	14.7	1.3	1.3	4.31 (0.87)
24. Facilitate an ability to relate the Omani Curriculum to everyday life?	60.8	27.0	6.8	4.1	1.4	4.42 (0.89)
25. Reflect an ability and desire to apply what is learned from the Omani Curriculum to one's life?	26.7	46.7	18.7	5.3	2.7	3.89 (0.95)
26. Specifically aim to develop student achievement on each of the following cognitive levels?						
a. Memory: the recall or remembering of facts, rules, concepts, generalizations, etc.	28.8	46.6	19.2	4.1	1.4	3.97 (0.88)
b. Comprehension: understanding what is being communicated but not necessarily relating it to other things.	23.6	38.9	16.7	15.3	5.6	3.60 (1.17)
c. Application: using knowledge, methods, theories, etc., in new stuations (to solve problems, for example).	27.0	45.9	20.3	5.4	1.4	3.92 (0.90)
d. Analysis: breaking something down into its component parts and understanding the interrelationships of the parts.	33.8	40.5	17.6	5.4	2.7	3.97 (0.99)
e. Synthesis: putting things together to form a new entity such as a new idea, hypothesis, or set of relationships.	36.5	36.5	17.6	5.4	4.1	3.96 (1.07)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IB2	Response*					
To what extent do the general objectives of the Omani Educational Curriculum:	5 %	4 %	3 %	2 %	1 %	Mean (sd)
26. Specifically aim to develop student achievement on each of the following cognitive levels?						
f. Evaluation: making quantitative and qualitative judgements based on stated standards or criteria.	22.7	44.0	25.3	6.7	1.3	3.80 (0.92)
27. Develop knowledge of facts, concepts, and generalizations which make up the various subject matter of the Omani Educational Curriculum?	36.0	49.3	14.7	0.0	0.0	4.21 (0.68)
28. To what extent is there evidence that attention is being given to coordination and integration of the Omani Educational Curriculum among the various subject matters?	16.0	53.3	28.0	1.3	1.3	3.81 (0.77)
29. To what extent are efforts made to follow up the progress of students (from 1st to 3rd grade) to determine that the sequencing and content of the subject matter is meeting the needs of the Omani student?	12.0	41.3	30.7	14.7	1.3	3.48 (0.94)
30. To what extent has the Ministry of Education demonstrated responsibility for facilitating the Omani Educational Curriculum, through recognition that specific facilities and equipment, as well as properly trained teachers, are needed?	26.7	44.0	20.0	8.0	1.3	3.87 (0.95)
31. Emphasize the affective aspects of the subject matter (eg. values, attitudes,etc.)?	32.9	53.4	11.0	2.7	0.0	4.16 (0.73)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 1
Process of Curriculum Development
(Teacher)

Item IIA1 1a: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that teachers should participate in such development?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	52.9	14.9	4.6	10.3	17.2	3.76 (1.59)
Arabic Language	59.3	13.3	9.7	4.4	13.3	4.01 (1.44)
English Language	63.8	29.3	5.2	0.9	0.9	4.54 (0.72)
Mathematics	45.9	16.2	18.0	3.6	16.2	3.72 (1.48)
Specialized Subject Matters in The Arts						
General Sciences	41.9	16.1	3.2	22.6	16.1	3.45 (1.61)
History	41.3	19.0	15.9	14.3	9.5	3.68 (1.39)
Geography	38.6	14.3	15.7	10.0	21.4	3.39 (1.59)
Civic Education	52.5	20.0	12.5	2.5	12.5	3.98 (1.39)
Specialized Subject Matters in The Sciences						
Chemistry	45.5	27.3	12.7	5.5	9.1	3.95 (1.28)
Physics	58.9	10.7	10.7	8.9	10.7	3.98 (1.43)
Biology	50.0	18.5	18.5	5.6	7.4	3.98 (1.27)
Human Culture	67.7	9.7	6.5	3.2	12.9	4.16 (1.44)

Item IIA1 1b: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that supervisors should participate in such development?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	48.8	19.8	5.8	8.1	17.4	3.74 (1.55)
Arabic Language	44.6	29.5	7.1	9.8	8.9	3.91 (1.31)
English Language	41.2	42.1	13.2	1.8	1.8	4.19 (0.86)
Mathematics	37.0	32.4	13.0	4.6	13.0	3.76 (1.35)
Specialized Subject Matters in The Arts						
General Sciences	35.5	29.0	9.7	16.1	9.7	3.65 (1.38)
History	39.7	25.4	19.0	7.9	7.9	3.81 (1.27)
Geography	29.4	29.4	19.1	11.8	10.3	3.56 (1.31)
Civic Education	45.0	30.0	12.5	2.5	10.0	3.98 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	36.4	34.5	18.2	7.3	3.6	3.93 (1.09)
Physics	41.8	34.5	7.3	12.7	3.6	3.98 (1.16)
Biology	35.2	46.3	9.3	3.7	5.6	4.02 (1.06)
Human Culture	61.3	22.6	3.2	6.5	6.5	4.26 (1.21)

Item IIA1 1c: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that education administrators should participate in such development?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	31.0	15.5	28.6	17.9	7.1	3.45 (1.29)
Arabic Language	20.2	19.3	24.8	15.6	20.2	3.04 (1.41)
English Language	43.6	26.4	19.1	7.3	3.6	3.99 (1.12)
Mathematics	24.0	21.2	22.1	14.4	18.3	3.18 (1.43)
Specialized Subject Matters in The Arts						
General Sciences	36.7	26.7	3.3	23.3	10.0	3.57 (1.46)
History	28.3	18.3	21.7	13.3	18.3	3.25 (1.47)
Geography	19.7	21.2	16.7	13.6	28.8	2.89 (1.52)
Civic Education	33.3	33.3	16.7	5.6	11.1	3.72 (1.30)
Specialized Subject Matters in The Sciences						
Chemistry	15.4	36.5	21.2	13.5	13.5	3.27 (1.27)
Physics	12.7	40.0	20.0	12.7	14.5	3.24 (1.26)
Biology	22.6	20.8	26.4	22.6	7.5	3.28 (1.26)
Human Culture	30.0	20.0	23.3	13.3	13.3	3.40 (1.40)

Item IIA1 1d: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that students should participate in such development?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.5	14.1	26.9	21.8	16.7	3.00 (1.37)
Arabic Language	23.3	11.7	17.5	14.6	33.0	2.78 (1.58)
English Language	50.5	19.8	15.8	7.9	5.9	4.01 (1.24)
Mathematics	6.7	15.4	20.2	24.0	33.7	2.38 (1.28)
Specialized Subject Matters in The Arts						
General Sciences	10.0	20.0	10.0	13.3	46.7	2.33 (1.49)
History	17.2	7.8	21.9	12.5	40.6	2.48 (1.51)
Geography	6.0	13.4	17.9	13.4	49.3	2.13 (1.33)
Civic Education	23.7	15.8	15.8	7.9	36.8	2.82 (1.64)
Specialized Subject Matters in The Sciences						
Chemistry	15.4	19.2	15.4	15.4	34.6	2.65 (1.51)
Physics	9.4	11.3	32.1	13.2	34.0	2.49 (1.33)
Biology	11.5	21.2	23.1	19.2	25.0	2.75 (1.36)
Human Culture	36.7	16.7	16.7	10.0	20.0	3.40 (1.57)

Item IIA1 1e: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that <u>parents</u> should participate in such development?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	14.5	7.9	17.1	23.7	36.8	2.40 (1.42)
Arabic Language	11.4	6.7	14.3	21.9	45.7	2.16 (1.37)
English Language	18.1	37.1	31.4	6.7	6.7	3.53 (1.08)
Mathematics	4.0	8.9	11.9	22.8	52.5	1.89 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	9.7	12.9	6.5	16.1	54.8	2.07 (1.44)
History	6.5	3.2	9.7	21.0	59.7	1.76 (1.17)
Geography	0.0	3.1	10.8	15.4	70.8	1.46 (0.81)
Civic Education	11.1	8.3	11.1	19.4	50.0	2.11 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	5.8	1.9	21.2	23.1	48.1	1.94 (1.15)
Physics	3.8	7.5	11.3	22.6	54.7	1.83 (1.14)
Biology	5.8	9.6	21.2	25.0	38.5	2.19 (1.22)
Human Culture	13.8	6.9	27.6	17.2	34.5	2.48 (1.41)

Item IIA1 1f: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that <u>concerned groups like industry, commerce, etc.</u> should participate in such development?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.5	19.0	24.1	22.8	17.7	2.94 (1.34)
Arabic Language	20.0	19.1	22.7	13.6	24.5	2.96 (1.46)
English Language	2.0	26.3	48.5	15.2	8.1	2.99 (0.91)
Mathematics	14.4	24.0	23.1	16.3	22.1	2.92 (1.37)
Specialized Subject Matters in The Arts						
General Sciences	10.3	31.0	17.2	13.8	27.6	2.83 (1.42)
History	31.7	19.0	6.3	14.3	28.6	3.11 (1.67)
Geography	25.8	19.7	19.7	13.6	21.2	3.15 (1.49)
Civic Education	37.8	16.2	13.5	10.8	21.6	3.38 (1.61)
Specialized Subject Matters in The Sciences						
Chemistry	19.2	25.0	21.2	13.5	21.2	3.08 (1.43)
Physics	18.2	34.5	20.0	14.5	12.7	3.31 (1.29)
Biology	15.1	24.5	18.9	15.1	26.4	2.87 (1.44)
Human Culture	53.1	21.9	12.5	6.3	6.3	4.09 (1.23)

Item IIA1 2a: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In defining the objective of your subject matter.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	36.2	27.5	12.5	12.5	11.2	3.65 (1.38)
Arabic Language	26.6	19.3	18.3	16.5	19.3	3.17 (1.48)
English Language	11.1	34.3	27.3	11.1	16.2	3.13 (1.24)
Mathematics	25.2	21.5	17.8	15.0	20.6	3.16 (1.48)
Specialized Subject Matters in The Arts						
General Sciences	35.5	22.6	6.5	9.7	25.8	3.32 (1.66)
History	20.6	20.6	23.7	15.9	19.0	3.08 (1.41)
Geography	33.8	22.5	15.5	11.3	16.9	3.45 (1.48)
Civic Education	30.0	20.0	20.0	15.0	15.0	3.35 (1.44)
Specialized Subject Matters in The Sciences						
Chemistry	18.9	37.7	22.6	9.4	11.3	3.43 (1.23)
Physics	19.6	25.0	17.9	16.1	21.4	3.05 (1.45)
Biology	25.0	36.5	28.8	3.8	5.8	3.71 (1.07)
Human Culture	27.3	21.2	15.2	12.1	24.2	2.15 (1.56)

Item IIA1 2b: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In choosing and sequencing the topics to be included in each grade level.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.3	24.7	24.7	14.8	18.5	3.07 (1.36)
Arabic Language	17.4	16.5	14.7	19.3	32.1	2.68 (1.50)
English Language	2.6	23.5	31.3	16.5	26.1	2.60 (1.18)
Mathematics	18.1	19.0	14.3	20.0	28.6	2.78 (1.49)
Specialized Subject Matters in The Arts						
General Sciences	13.3	20.0	16.7	6.7	43.3	2.53 (1.55)
History	11.1	14.3	12.7	15.9	46.0	2.29 (1.45)
Geography	11.4	10.0	18.6	18.6	41.4	2.31 (1.40)
Civic Education	17.9	12.8	20.5	2.6	46.2	2.54 (1.60)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	24.5	28.3	17.0	22.6	2.77 (1.27)
Physics	12.5	26.8	10.7	16.1	33.9	2.68 (1.49)
Biology	13.2	24.5	18.9	22.6	20.8	2.87 (1.36)
Human Culture	22.6	9.7	29.0	9.7	29.0	2.87 (1.52)

Item IIA1 2c: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In the way the selected material is presented in the text books.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.1	28.7	19.5	12.6	23.0	3.02 (1.41)
Arabic Language	13.3	19.5	15.9	23.0	28.3	2.66 (1.41)
English Language	11.4	28.1	17.5	15.8	27.2	2.81 (1.40)
Mathematics	11.9	29.4	18.3	13.8	26.6	2.86 (1.40)
Specialized Subject Matters in The Arts						
General Sciences	22.6	19.4	22.6	3.2	32.3	2.97 (1.58)
History	11.1	15.9	14.3	23.8	34.9	2.44 (1.40)
Geography	10.0	18.6	28.6	12.9	30.0	2.66 (1.35)
Civic Education	27.5	12.5	20.0	10.0	30.0	2.98 (1.61)
Specialized Subject Matters in The Sciences						
Chemistry	14.5	27.3	21.8	10.9	25.5	3.95 (1.42)
Physics	10.5	21.1	35.1	8.8	24.6	2.84 (1.31)
Biology	11.1	18.5	35.2	13.0	22.2	2.83 (1.29)
Human Culture	27.3	6.1	30.3	18.2	18.2	3.06 (1.46)

Item IIA1 2d: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In choosing the activities that suit the students.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.4	25.6	17.4	22.1	17.4	3.04 (1.38)
Arabic Language	18.3	19.1	23.5	20.9	18.3	2.98 (1.37)
English Language	7.1	30.1	26.5	20.4	15.9	2.92 (1.20)
Mathematics	13.5	33.3	18.0	16.2	18.9	3.06 (1.34)
Specialized Subject Matters in The Arts						
General Sciences	19.4	29.0	16.1	9.7	25.8	3.07 (1.50)
History	17.5	20.6	23.8	14.3	23.8	2.94 (1.42)
Geography	28.2	21.1	18.3	12.7	19.7	3.25 (1.49)
Civic Education	30.0	20.0	12.5	17.5	20.0	3.23 (1.54)
Specialized Subject Matters in The Sciences						
Chemistry	18.2	25.5	30.9	12.7	12.7	3.24 (1.26)
Physics	15.8	26.3	28.1	12.3	17.5	3.11 (1.32)
Biology	20.8	30.2	28.3	11.3	9.4	3.42 (1.22)
Human Culture	12.5	15.6	25.0	31.3	15.6	2.78 (1.26)

Item IIA1 2e: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In trying out the suggested material on a small number of classes before the wide scale installation of the new curriculum.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	18.6	24.4	17.4	17.4	22.1	3.00 (1.44)
Arabic Language	20.0	13.9	7.8	16.5	41.7	2.54 (1.61)
English Language	15.9	27.4	21.2	16.8	18.6	3.05 (1.36)
Mathematics	10.0	17.3	27.3	15.5	30.0	2.62 (1.34)
Specialized Subject Matters in The Arts						
General Sciences	12.9	22.6	12.9	16.1	35.5	2.61 (1.50)
History	6.5	14.5	27.4	16.1	35.5	2.40 (1.29)
Geography	8.5	19.7	11.3	18.3	42.3	2.34 (1.41)
Civic Education	17.9	12.8	10.3	20.5	38.5	2.51 (1.55)
Specialized Subject Matters in The Sciences						
Chemistry	5.7	26.4	22.6	17.0	28.3	2.64 (1.30)
Physics	7.0	19.3	33.3	14.0	26.3	2.67 (1.26)
Biology	11.3	22.6	22.6	18.9	24.5	2.77 (1.35)
Human Culture	9.1	18.2	24.2	21.2	27.3	2.61 (1.32)

Item IIA1 2f: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In evaluating every step of the development process.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	20.9	26.7	18.6	17.4	16.3	3.19 (1.39)
Arabic Language	25.2	15.7	10.4	19.1	29.6	2.88 (1.60)
English Language	11.5	36.3	26.5	10.6	15.0	3.19 (1.23)
Mathematics	13.9	20.4	30.6	17.6	17.6	2.95 (1.29)
Specialized Subject Matters in The Arts						
General Sciences	22.6	22.6	12.9	12.9	29.0	2.97 (1.58)
History	12.5	21.9	25.0	7.8	32.8	2.73 (1.44)
Geography	11.3	15.5	18.3	18.3	36.6	2.47 (1.41)
Civic Education	25.0	5.6	22.2	8.3	38.9	2.69 (1.64)
Specialized Subject Matters in The Sciences						
Chemistry	20.8	18.9	30.2	17.0	13.2	3.17 (1.31)
Physics	12.5	21.4	23.2	19.6	23.2	2.80 (1.35)
Biology	11.3	30.2	20.8	18.9	18.9	2.96 (1.32)
Human Culture	18.8	18.8	21.9	18.8	21.9	2.94 (1.44)

Item IIA1 3a: To what extent do you feel that your feedback to the designers was taken seriously and adopted in accomplishing each step: during the curriculum development process.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	19.7	18.4	22.4	14.5	3.18 (1.41)
Arabic Language	11.0	15.6	15.6	12.8	45.0	2.35 (1.46)
English Language	4.2	16.8	41.1	16.8	21.1	2.66 (1.12)
Mathematics	9.5	18.1	24.8	15.2	32.4	2.57 (1.36)
Specialized Subject Matters in The Arts						
General Sciences	13.3	13.3	10.0	30.0	33.3	2.43 (1.43)
History	6.6	11.5	21.3	18.0	42.6	2.21 (1.29)
Geography	7.4	7.4	19.1	10.3	55.9	2.00 (1.32)
Civic Education	7.9	10.5	28.9	15.8	36.8	2.37 (1.30)
Specialized Subject Matters in The Sciences						
Chemistry	7.8	13.7	29.4	21.6	27.5	2.53 (1.26)
Physics	8.9	17.9	26.8	5.4	41.1	2.48 (1.41)
Biology	3.8	28.8	21.2	17.3	28.8	2.62 (1.29)
Human Culture	13.3	16.7	23.3	20.0	26.7	2.70 (1.39)

Item IIA1 3b: To what extent do you feel that your feedback to the designers was taken seriously and adopted in accomplishing each step: during the curriculum implementation and yearly follow up.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.9	18.5	27.2	14.8	13.6	3.28 (1.36)
Arabic Language	18.8	13.4	17.9	19.6	30.4	2.71 (1.49)
English Language	3.9	23.5	43.1	14.7	14.7	2.87 (1.06)
Mathematics	9.3	23.1	26.9	14.8	25.9	2.75 (1.32)
Specialized Subject Matters in The Arts						
General Sciences	16.1	16.1	6.5	29.0	32.3	2.55 (1.50)
History	14.8	8.2	26.2	14.8	36.1	2.51 (1.43)
Geography	5.7	15.7	25.7	20.0	32.9	2.41 (1.26)
Civic Education	12.5	12.5	22.5	22.5	30.0	2.55 (1.38)
Specialized Subject Matters in The Sciences						
Chemistry	15.4	17.3	30.8	21.2	15.4	2.96 (1.28)
Physics	10.5	28.1	21.1	19.3	21.1	2.88 (1.32)
Biology	8.0	26.0	36.0	18.0	12.0	3.00 (1.13)
Human Culture	13.3	20.0	23.3	16.7	26.7	2.77 (1.41)

Item IIA1 4a: To what extent do you feel that the supervisors were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	42.5	22.5	8.7	15.0	11.2	3.70 (1.44)
Arabic Language	27.3	19.1	15.5	23.6	14.5	3.21 (1.44)
English Language	23.1	32.7	36.5	5.8	1.9	3.69 (0.96)
Mathematics	22.2	27.3	28.3	9.1	13.1	3.36 (1.29)
Specialized Subject Matters in The Arts						
General Sciences	36.7	20.0	13.3	13.3	16.7	3.47 (1.53)
History	22.6	22.6	24.2	19.4	11.3	3.26 (1.31)
Geography	24.3	20.0	24.3	11.4	20.0	3.17 (1.44)
Civic Education	28.9	34.2	5.3	13.2	18.4	3.42 (1.50)
Specialized Subject Matters in The Sciences						
Chemistry	19.2	28.8	30.8	17.3	3.8	3.42 (1.11)
Physics	23.6	25.5	23.6	12.7	14.5	3.31 (1.36)
Biology	14.8	44.4	25.9	7.4	7.4	3.52 (1.08)
Human Culture	38.7	19.4	12.9	12.9	16.1	3.52 (1.53)

Item IIA1 4b: To what extent do you feel that the education administrators were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	14.3	26.0	31.2	22.1	6.5	3.20 (1.14)
Arabic Language	12.7	17.3	14.5	24.5	30.9	2.56 (1.41)
English Language	35.8	34.0	19.8	7.5	2.8	3.93 (1.06)
Mathematics	22.2	32.3	22.2	12.1	11.1	3.42 (1.27)
Specialized Subject Matters in The Arts						
General Sciences	32.3	22.6	22.6	9.7	12.9	3.52 (1.39)
History	22.6	22.6	29.0	8.1	17.7	3.24 (1.38)
Geography	11.8	26.5	19.1	19.1	23.5	2.84 (1.37)
Civic Education	23.1	35.9	10.3	15.4	15.4	3.36 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	35.8	26.4	24.5	3.8	3.23 (1.05)
Physics	7.1	44.6	21.4	12.5	14.3	3.18 (1.19)
Biology	15.4	34.6	28.8	13.5	7.7	3.37 (1.14)
Human Culture	19.4	25.8	22.6	16.1	16.1	3.16 (1.37)

Item IIA1 4c: To what extent do you feel that the students were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.5	20.0	21.2	17.5	23.7	2.90 (1.43)
Arabic Language	5.4	14.4	15.3	18.0	46.8	2.14 (1.30)
English Language	3.6	10.9	12.7	20.0	52.7	1.93 (1.19)
Mathematics	1.9	7.5	22.6	28.3	39.6	2.04 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	3.4	3.4	24.1	17.2	51.7	1.90 (1.11)
History	6.3	10.9	7.8	21.9	53.1	1.95 (1.28)
Geography	4.4	4.4	13.2	16.2	61.8	1.74 (1.13)
Civic Education	7.9	7.9	10.5	13.2	60.5	1.90 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	3.6	10.9	18.2	18.2	49.1	2.02 (1.21)
Physics	0.0	5.5	20.0	21.8	52.7	1.78 (0.96)
Biology	3.8	15.4	25.0	19.2	36.5	2.31 (1.23)
Human Culture	12.5	9.4	28.1	9.4	40.6	2.44 (1.44)

Item IIA1 4d: To what extent do you feel that the parents were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.7	4.3	21.4	24.3	34.3	2.43 (1.41)
Arabic Language	8.6	3.8	10.5	18.1	59.0	1.85 (1.27)
English Language	1.0	4.2	8.3	15.6	70.8	1.49 (0.89)
Mathematics	2.0	3.0	12.1	24.2	58.6	1.66 (0.95)
Specialized Subject Matters in The Arts						
General Sciences	0.0	10.0	10.0	20.0	60.0	1.70 (1.02)
History	6.3	4.8	3.2	22.2	63.5	1.68 (1.16)
Geography	0.0	4.3	5.9	17.4	72.5	1.42 (0.79)
Civic Education	5.4	5.4	5.4	16.2	67.6	1.65 (1.16)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	9.4	13.2	11.3	66.0	1.66 (1.04)
Physics	0.0	1.8	9.1	18.2	70.9	1.42 (0.74)
Biology	3.8	7.7	15.4	25.0	48.1	1.94 (1.15)
Human Culture	6.5	6.5	12.9	16.1	58.1	1.87 (1.26)

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Item IIA1 4e: To what extent do you feel that the various social groups were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	10.8	16.2	25.7	23.0	24.3	2.66 (1.31)
Arabic Language	16.0	10.4	20.8	17.0	35.8	2.54 (1.47)
English Language	1.1	3.2	11.8	28.0	55.9	1.66 (0.89)
Mathematics	9.0	16.0	25.0	17.0	33.0	2.51 (1.34)
Specialized Subject Matters in The Arts						
General Sciences	6.7	26.7	16.7	30.0	20.0	2.70 (1.26)
History	31.7	15.0	15.0	13.3	25.0	3.15 (1.60)
Geography	17.4	18.8	18.8	8.7	36.2	2.73 (1.54)
Civic Education	23.7	15.8	13.2	15.8	31.6	2.84 (1.60)
Specialized Subject Matters in The Sciences						
Chemistry	3.8	26.4	28.3	17.0	24.5	2.68 (1.22)
Physics	3.8	25.0	26.9	17.3	26.9	2.62 (1.24)
Biology	7.7	25.0	17.3	23.1	26.9	2.64 (1.33)
Human Culture	26.7	13.3	20.0	13.3	26.7	3.00 (1.58)

Item IIA1 5: To what extent do you have a clear picture of the curriculum in your subject matter from grade 1 through 12?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.9	28.6	18.2	15.6	7.8	3.57 (1.28)
Arabic Language	32.1	31.1	20.8	9.4	6.6	3.73 (1.20)
English Language	16.2	46.5	26.3	8.1	3.0	3.65 (0.95)
Mathematics	29.9	45.8	11.2	4.7	8.4	3.84 (1.16)
Specialized Subject Matters in The Arts						
General Sciences	28.6	39.3	28.6	3.6	0.0	3.93 (0.86)
History	46.2	36.9	9.2	4.6	3.1	4.19 (1.00)
Geography	47.9	32.4	12.7	1.4	5.6	4.16 (1.08)
Civic Education	55.3	34.2	2.6	7.9	0.0	4.37 (0.88)
Specialized Subject Matters in The Sciences						
Chemistry	22.6	52.7	15.1	9.4	0.0	3.89 (0.87)
Physics	32.7	45.5	18.2	3.6	0.0	4.07 (0.81)
Biology	33.3	45.1	17.6	3.9	0.0	4.08 (0.82)
Human Culture	48.4	32.3	16.1	3.2	0.0	4.26 (0.86)

Item IIA1 6a: If you did not participate in the curriculum development process, to what extent have you been informed about th s curriculum during its development? At the beginning

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	12.0	31.3	21.7	18.1	16.9	3.04 (1.29)
Arabic Language	12.4	19.5	24.8	25.7	17.7	2.83 (1.28)
English Language	8.8	21.2	17.7	12.4	39.8	2.47 (1.42)
Mathematics	15.9	23.4	29.9	11.2	19.6	3.05 (1.33)
Specialized Subject Matters in The Arts						
General Sciences	0.0	46.7	20.0	16.7	16.7	2.97 (1.16)
History	13.6	32.2	22.0	10.2	22.0	3.05 (1.37)
Geography	7.2	23.2	17.4	17.4	34.8	2.51 (1.37)
Civic Education	20.0	31.4	11.4	17.1	20.0	3.14 (1.46)
Specialized Subject Matters in The Sciences						
Chemistry	7.4	38.9	25.9	13.0	14.8	3.11 (1.19)
Physics	8.9	28.6	28.6	14.3	19.6	2.93 (1.26)
Biology	8.2	40.8	26.5	16.3	8.2	3.25 (1.09)
Human Culture	11.1	37.0	25.9	7.4	18.5	3.15 (1.29)

Item IIA1 6b: If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during its development? During the development process

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.2	26.6	24.1	16.5	17.7	3.05 (1.33)
Arabic Language	18.2	21.8	27.3	17.3	15.5	3.10 (1.32)
English Language	10.2	17.6	26.9	24.1	21.3	2.71 (1.27)
Mathematics	12.4	29.5	27.6	11.4	19.0	3.05 (1.30)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	16.7	20.0	13.3	3.03 (1.13)
History	15.5	41.4	13.8	13.8	15.5	3.28 (1.32)
Geography	7.0	23.9	16.9	23.9	28.2	2.58 (1.32)
Civic Education	25.7	20.0	17.1	17.1	20.0	3.14 (1.50)
Specialized Subject Matters in The Sciences						
Chemistry	1.9	51.9	20.4	16.7	9.3	3.20 (1.05)
Physics	7.3	34.5	23.6	18.2	16.4	2.98 (1.23)
Biology	8.0	42.0	18.0	28.0	4.0	3.22 (1.08)
Human Culture	22.2	18.5	25.9	11.1	22.2	3.07 (1.47)

Item IIA1 6c: If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during its development? When you were asked to implement it

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	28.0	32.9	14.6	13.4	11.0	3.54 (1.33)
Arabic Language	38.4	35.7	15.2	3.6	7.1	3.95 (1.15)
English Language	17.9	35.7	31.3	7.1	8.0	3.48 (1.12)
Mathematics	26.5	34.3	24.5	6.9	7.8	3.65 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	20.0	33.3	30.0	13.3	3.3	3.53 (1.07)
History	32.8	39.7	19.0	5.2	3.4	3.93 (1.02)
Geography	35.3	26.5	22.1	5.9	10.3	3.71 (1.29)
Civic Education	44.7	28.9	7.9	5.3	13.2	3.87 (1.40)
Specialized Subject Matters in The Sciences						
Chemistry	21.2	48.1	21.2	3.8	5.8	3.75 (1.03)
Physics	32.7	34.5	16.4	12.7	3.6	3.80 (1.15)
Biology	29.4	43.1	21.6	2.0	3.9	3.92 (0.98)
Human Culture	36.4	27.3	12.1	15.2	9.1	3.67 (1.36)

Item IIA1 7a: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Defining the philosophy of curriculum development

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.9	26.8	28.0	14.6	14.6	3.15 (1.28)
Arabic Language	13.2	26.3	24.6	15.8	20.2	2.97 (1.33)
English Language	0.9	18.3	20.9	17.4	42.6	2.17 (1.19)
Mathematics	3.8	27.4	29.2	19.8	19.8	2.76 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	13.8	27.6	13.8	10.3	34.5	2.76 (1.53)
History	18.3	20.0	30.0	15.0	16.7	3.08 (1.33)
Geography	14.5	26.1	21.7	8.7	29.0	2.88 (1.45)
Civic Education	25.6	23.1	15.4	23.1	12.8	3.26 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	13.5	30.8	34.6	11.5	9.6	3.27 (1.14)
Physics	10.9	34.5	27.3	12.7	14.5	3.15 (1.22)
Biology	12.0	28.0	30.0	16.0	14.0	3.08 (1.23)
Human Culture	22.6	25.8	19.4	16.1	16.1	3.23 (1.41)

Item IIA1 7b: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Stating the objectives of each subject matter

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.3	25.9	16.0	14.8	9.9	3.58 (1.35)
Arabic Language	27.0	26.1	20.0	14.8	12.2	3.41 (1.35)
English Language	5.2	16.5	20.9	16.5	40.9	2.29 (1.30)
Mathematics	7.7	43.3	25.0	14.4	9.6	3.25 (1.10)
Specialized Subject Matters in The Arts						
General Sciences	17.2	31.0	27.6	13.8	10.3	3.31 (1.23)
History	23.8	33.3	20.6	14.3	7.9	3.51 (1.23)
Geography	21.7	34.8	18.8	7.2	17.4	3.36 (1.37)
Civic Education	34.2	21.1	15.8	18.4	10.5	3.50 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	14.8	48.1	25.9	7.4	3.7	3.63 (0.96)
Physics	14.5	43.6	27.3	9.1	5.5	3.53 (1.03)
Biology	23.5	39.2	25.5	7.8	3.9	3.71 (1.05)
Human Culture	34.4	18.8	28.1	3.1	15.6	3.53 (1.41)

Item IIA1 7c: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Choosing the topics to be included

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	28.6	26.0	19.5	11.7	14.3	3.43 (1.39)
Arabic Language	21.6	23.3	25.9	12.1	17.2	3.20 (1.37)
English Language	1.7	7.8	18.3	18.3	53.9	1.85 (1.09)
Mathematics	5.7	29.5	28.6	22.9	13.3	2.91 (1.14)
Specialized Subject Matters in The Arts						
General Sciences	10.0	23.3	33.3	13.3	20.0	2.90 (1.27)
History	17.7	40.3	14.5	14.5	12.9	3.36 (1.29)
Geography	11.1	22.4	20.9	14.9	29.9	2.72 (1.41)
Civic Education	27.0	24.3	21.6	8.1	18.9	3.32 (1.45)
Specialized Subject Matters in The Sciences						
Chemistry	18.9	22.6	39.6	13.2	5.7	3.36 (1.11)
Physics	16.4	27.3	34.5	12.7	9.1	3.29 (1.17)
Biology	7.5	49.1	20.8	11.3	11.3	3.30 (1.14)
Human Culture	22.6	25.8	35.5	3.2	12.9	3.42 (1.26)

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Item IIA1 7d: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Writing the material

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	23.5	17.3	30.9	13.6	14.8	3.21 (1.35)
Arabic Language	17.7	25.7	17.7	19.5	19.5	3.03 (1.40)
English Language	1.8	8.0	15.9	15.0	59.3	1.78 (1.09)
Mathematics	5.6	29.0	25.2	23.4	16.8	2.83 (1.19)
Specialized Subject Matters in The Arts						
General Sciences	10.0	33.3	30.0	6.7	20.0	3.07 (1.29)
History	22.6	29.0	24.2	11.3	12.9	3.37 (1.31)
Geography	11.6	21.7	26.1	15.9	24.6	2.80 (1.35)
Civic Education	27.0	27.0	10.8	16.2	18.9	3.27 (1.50)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	35.8	32.1	7.5	11.3	3.32 (1.16)
Physics	5.6	37.0	33.3	13.0	11.1	3.13 (1.08)
Biology	10.0	50.0	22.0	4.0	14.0	3.38 (1.18)
Human Culture	28.1	25.0	18.8	12.5	15.6	3.38 (1.43)

Item IIA1 7e: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Trying it out on a small scale

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.9	21.7	26.5	14.5	20.5	3.00 (1.37)
Arabic Language	12.3	21.1	18.4	18.4	29.8	2.68 (1.41)
English Language	1.8	12.4	31.9	15.9	38.1	2.24 (1.14)
Mathematics	3.8	22.6	24.5	20.8	28.3	2.53 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	6.7	36.7	13.3	16.7	26.7	2.80 (1.38)
History	19.7	13.1	23.0	18.0	26.2	2.82 (1.47)
Geography	4.3	20.0	21.4	25.7	28.0	2.46 (1.22)
Civic Education	13.5	16.2	16.2	21.6	32.4	2.57 (1.44)
Specialized Subject Matters in The Sciences						
Chemistry	11.5	23.1	30.8	19.2	15.4	2.96 (1.24)
Physics	7.3	18.2	38.2	16.4	20.0	2.76 (1.19)
Biology	6.0	32.0	22.0	16.0	24.0	2.80 (1.29)
Human Culture	9.7	19.4	29.0	19.4	22.6	2.74 (1.29)

Item IIA1 7f: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Evaluating the try out

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	20.2	17.9	27.4	9.5	25.0	2.99 (1.45)
Arabic Language	16.1	19.6	24.1	7.1	33.0	2.79 (1.49)
English Language	3.6	18.8	26.8	16.1	34.8	2.40 (1.24)
Mathematics	1.0	18.3	26.9	20.2	33.7	2.33 (1.15)
Specialized Subject Matters in The Arts						
General Sciences	10.0	23.3	23.3	13.3	30.0	2.70 (1.39)
History	18.3	6.7	18.3	21.7	35.0	2.52 (1.49)
Geography	4.3	14.5	13.0	20.3	47.8	2.07 (1.26)
Civic Education	11.1	16.7	13.9	19.4	38.9	2.42 (1.44)
Specialized Subject Matters in The Sciences						
Chemistry	11.1	22.2	22.2	18.5	25.9	2.74 (1.36)
Physics	10.9	10.9	30.9	12.7	34.5	2.51 (1.36)
Biology	2.0	35.3	17.6	19.6	25.5	2.69 (1.26)
Human Culture	16.1	16.1	25.8	9.7	32.3	2.74 (1.48)

Item IIA1 7g: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Modifying the material for final version

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	21.7	25.3	22.9	18.1	12.0	3.27 (1.32)
Arabic Language	17.7	22.1	20.4	15.0	24.8	2.93 (1.44)
English Language	2.7	10.8	24.3	17.1	45.0	2.09 (1.17)
Mathematics	5.7	28.3	30.2	14.2	21.7	2.82 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	3.3	36.7	30.0	6.7	23.3	2.90 (1.24)
History	19.4	22.6	32.3	8.1	17.7	3.18 (1.34)
Geography	7.1	27.1	17.1	15.7	32.9	2.60 (1.38)
Civic Education	15.8	26.3	15.8	13.2	28.9	2.87 (1.49)
Specialized Subject Matters in The Sciences						
Chemistry	5.5	38.2	38.2	7.3	10.9	3.20 (1.04)
Physics	12.7	23.6	32.7	10.9	20.0	2.98 (1.30)
Biology	6.0	40.0	28.0	10.0	16.0	3.10 (1.18)
Human Culture	25.0	21.9	21.9	12.5	18.8	3.22 (1.45)

Item IIA1 8a: The process of curriculum development continues after it had been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following: To what extent is each edition of the textbook improved in comparison with the one of the previous year.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	31.3	21.7	21.7	15.7	9.6	3.49 (1.34)
Arabic Language	28.4	28.4	19.0	11.2	12.9	3.48 (1.35)
English Language	8.6	34.5	37.1	13.8	6.0	3.26 (1.01)
Mathematics	21.3	39.8	19.4	13.0	6.5	4.57 (1.15)
Specialized Subject Matters in The Arts						
General Sciences	26.7	36.7	13.3	16.7	6.7	3.60 (1.25)
History	31.7	33.3	22.2	4.8	7.9	3.76 (1.19)
Geography	29.2	31.9	19.4	9.7	9.7	3.61 (1.27)
Civic Education	32.5	40.0	15.0	5.0	7.5	3.85 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	25.5	47.3	25.5	1.8	0.0	3.96 (0.77)
Physics	21.8	50.9	16.4	5.5	5.5	3.78 (1.03)
Biology	34.6	28.8	25.0	3.8	7.7	3.79 (1.19)
Human Culture	24.2	45.5	9.1	9.1	12.1	3.61 (1.30)

Item IIA1 8b: The process of curriculum development continues after it had been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following: At the end of every school year, to what extent are you asked to give your evaluation of the curriculum and your suggestions for its improvements.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	26.7	29.1	17.4	16.3	10.5	3.45 (1.33)
Arabic Language	14.0	22.8	22.8	22.8	17.5	2.93 (1.32)
English Language	4.5	21.6	28.8	18.9	26.1	2.60 (1.22)
Mathematics	13.6	30.0	27.3	13.6	15.5	3.13 (1.26)
Specialized Subject Matters in The Arts						
General Sciences	16.7	40.0	20.0	6.7	16.7	3.33 (1.32)
History	25.4	19.0	19.0	20.6	15.9	3.18 (1.43)
Geography	19.7	25.4	21.1	11.3	22.5	3.09 (1.44)
Civic Education	15.0	30.0	20.0	15.0	20.0	3.05 (1.38)
Specialized Subject Matters in The Sciences						
Chemistry	18.2	27.3	30.9	12.7	10.9	3.29 (1.23)
Physics	20.0	36.4	21.8	14.5	7.3	3.47 (1.18)
Biology	10.2	40.8	28.6	10.2	10.2	3.31 (1.12)
Human Culture	18.8	21.9	25.0	12.5	21.9	3.03 (1.43)

Item IIA1 8c: The process of curriculum development continues after it had been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following: To what extent are you informed of the changes before it is given to you to implement.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.1	17.4	15.1	14.0	24.4	3.13 (1.57)
Arabic Language	30.6	19.8	11.7	18.0	19.8	3.23 (1.54)
English Language	15.2	23.2	22.3	17.0	22.3	2.92 (1.38)
Mathematics	13.2	21.7	19.8	17.9	27.4	2.76 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	26.7	23.3	10.0	6.7	33.3	3.03 (1.67)
History	28.6	11.1	14.3	17.5	28.6	2.94 (1.62)
Geography	29.2	23.6	15.3	12.5	19.4	3.31 (1.50)
Civic Education	17.9	17.9	23.1	12.8	28.2	2.85 (1.48)
Specialized Subject Matters in The Sciences						
Chemistry	12.7	23.6	29.1	7.3	27.3	2.87 (1.39)
Physics	29.1	21.8	23.6	10.9	14.5	3.40 (1.40)
Biology	20.4	24.5	22.4	6.1	26.5	3.06 (1.49)
Human Culture	18.8	18.8	25.0	9.4	28.1	2.91 (1.49)

Part II Section A: Part 1
Process of Curriculum Development
(Supervisor)

Item IIA1 1a: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that <u>teachers</u> should participate in such development?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	0.0	8.3	83.3	1.42 (1.17)
Arabic Language	87.5	6.3	0.0	0.0	6.3	4.69 (1.01)
English Language	42.1	36.8	15.3	5.3	0.0	4.16 (0.90)
Mathematics	66.7	33.3	0.0	0.0	0.0	4.67 (0.50)
Specialized Subject Matters in The Arts						
General Sciences	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
History	75.0	0.0	25.0	0.0	0.0	4.50 (0.93)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	60.0	0.0	40.0	0.0	0.0	4.20 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IIA1 1b: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that <u>supervisors</u> should participate in such development?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	0.0	0.0	91.7	1.33 (1.16)
Arabic Language	87.5	6.3	0.0	0.0	6.3	4.69 (1.01)
English Language	52.6	31.6	15.8	0.0	0.0	4.37 (0.76)
Mathematics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Specialized Subject Matters in The Arts						
General Sciences	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
History	87.5	12.5	0.0	0.0	0.0	4.88 (0.35)
Geography	71.4	28.6	0.0	0.0	0.0	4.71 (0.49)
Civic Education	60.0	40.0	0.0	0.0	0.0	4.60 (0.55)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IIA1 1c: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that education administrators should participate in such development?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	33.3	16.7	41.7	2.17 (1.27)
Arabic Language	46.7	26.7	20.0	6.7	0.0	4.13 (0.99)
English Language	33.3	38.9	11.1	11.1	5.6	3.83 (1.20)
Mathematics	33.3	33.3	22.2	11.1	0.0	3.89 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
History	28.6	14.3	42.9	14.3	0.0	3.57 (1.13)
Geography	33.3	16.7	16.7	33.3	0.0	3.50 (1.38)
Civic Education	0.0	40.0	40.0	20.0	0.0	3.20 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
Physics	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIA1 1d: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that students should participate in such development?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	16.7	50.0	8.3	25.0	2.53 (1.08)
Arabic Language	26.7	20.0	6.7	40.0	6.7	3.20 (1.42)
English Language	22.2	11.1	33.3	5.6	27.6	2.94 (1.51)
Mathematics	22.2	33.3	11.1	22.2	11.1	3.33 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	0.0	40.0	40.0	0.0	20.0	3.00 (1.23)
History	37.5	12.8	25.0	12.5	12.5	3.50 (1.51)
Geography	16.7	16.7	33.3	33.3	0.0	3.17 (1.17)
Civic Education	20.0	20.0	20.0	40.0	0.0	3.20 (1.30)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	33.3	0.0	33.3	16.7	3.00 (1.55)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	50.0	0.0	0.0	25.0	25.0	3.25 (2.06)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIA1 1e: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that parents should participate in such development?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	8.3	41.7	16.7	25.0	2.58 (1.24)
Arabic Language	21.4	7.1	35.7	28.6	7.1	3.07 (1.27)
English Language	16.7	11.1	38.9	0.0	33.3	2.78 (1.48)
Mathematics	11.1	33.3	22.2	11.1	22.2	3.00 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	0.0	20.0	0.0	40.0	40.0	2.00 (1.23)
History	14.3	14.3	14.3	28.6	28.6	2.57 (1.51)
Geography	28.6	14.3	14.3	28.6	14.3	3.14 (1.57)
Civic Education	20.0	0.0	40.0	40.0	0.0	3.00 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	16.7	33.3	16.7	2.67 (1.21)
Physics	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)
Biology	25.0	0.0	25.0	50.0	0.0	3.00 (1.41)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIA1 1f: In successful curriculum development, one of the basic ingredients is the full participation - of all those who are affected by the change - in the process of development from the beginning to the end. To what extent do you feel that concerned groups like industry, commerce, etc. should participate in such development?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	16.7	16.7	25.0	33.3	2.42 (1.38)
Arabic Language	56.3	12.5	25.0	6.3	0.0	4.19 (1.05)
English Language	0.0	5.6	55.6	22.2	16.7	2.50 (0.86)
Mathematics	66.7	11.1	0.0	11.1	11.1	4.11 (1.54)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
History	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	20.0	80.0	0.0	0.0	0.0	4.20 (0.45)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIA1 2a: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In defining the objective of your subject matter.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	8.3	25.0	58.3	1.75 (1.22)
Arabic Language	37.5	18.8	12.5	12.5	18.8	3.44 (1.59)
English Language	16.7	11.1	38.9	5.6	27.8	2.83 (1.43)
Mathematics	22.2	44.4	33.3	0.0	0.0	3.89 (0.78)
Specialized Subject Matters in The Arts						
General Sciences	0.0	25.0	50.0	0.0	25.0	2.75 (1.26)
History	0.0	57.1	14.3	0.0	28.6	3.00 (1.41)
Geography	0.0	16.7	50.0	0.0	33.3	2.50 (1.23)
Civic Education	0.0	0.0	50.0	50.0	0.0	2.50 (0.58)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	16.7	16.7	2.83 (1.17)
Physics	0.0	33.3	0.0	0.0	66.7	2.00 (1.73)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIA1 2b: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In choosing and sequencing the topics to be included in each grade level.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	8.3	16.7	25.0	41.7	2.17 (1.34)
Arabic Language	25.0	31.3	12.5	12.5	18.8	3.31 (1.49)
English Language	0.0	15.8	21.1	21.1	42.1	2.11 (1.15)
Mathematics	11.1	11.1	44.4	11.1	22.2	2.78 (1.30)
Specialized Subject Matters in The Arts						
General Sciences	0.0	20.0	60.0	0.0	20.0	2.80 (1.10)
History	0.0	28.6	28.6	14.3	28.6	2.57 (1.27)
Geography	0.0	16.7	33.3	16.7	33.3	2.33 (1.21)
Civic Education	0.0	0.0	50.0	50.0	0.0	2.50 (0.58)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	33.3	16.7	33.3	2.33 (1.21)
Physics	0.0	33.3	0.0	0.0	66.7	2.00 (1.73)
Biology	25.0	0.0	25.0	0.0	50.0	2.50 (1.92)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIA1 2c: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In the way the selected material is presented in the text books.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	16.7	25.0	33.3	16.7	2.67 (1.23)
Arabic Language	18.8	37.5	18.8	12.5	12.5	3.38 (1.31)
English Language	0.0	15.8	26.3	21.2	36.8	2.21 (1.13)
Mathematics	11.1	33.3	22.2	22.2	11.1	3.11 (1.27)
Specialized Subject Matters in The Arts						
General Sciences	0.0	25.0	50.0	0.0	25.0	2.75 (1.26)
History	0.0	33.3	16.7	16.7	33.3	2.50 (1.38)
Geography	0.0	0.0	50.0	16.7	33.3	2.17 (0.98)
Civic Education	0.0	0.0	50.0	50.0	0.0	2.50 (0.58)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIA1 2d: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In choosing the activities that suit the students.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	8.3	8.3	41.7	25.0	2.50 (1.45)
Arabic Language	25.0	56.3	6.3	6.3	6.3	3.88 (1.09)
English Language	10.5	10.5	31.6	26.3	21.1	2.63 (1.26)
Mathematics	0.0	33.3	44.4	11.1	11.1	3.00 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	0.0	40.0	40.0	0.0	20.0	3.00 (1.23)
History	14.3	14.3	28.6	0.0	42.9	2.57 (1.62)
Geography	0.0	0.0	33.3	16.7	50.0	1.83 (0.98)
Civic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	50.0	16.7	33.3	2.17 (0.98)
Physics	0.0	33.3	0.0	0.0	66.7	2.00 (1.73)
Biology	0.0	25.0	50.0	0.0	25.0	2.75 (1.26)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIA1 2e: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In trying out the suggested material on a small number of classes before the wide scale installation of the new curriculum.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.3	16.7	16.7	16.7	16.7	3.33 (1.56)
Arabic Language	12.5	18.8	31.3	12.5	25.0	2.81 (1.38)
English Language	5.3	26.3	26.3	0.0	42.1	2.53 (1.43)
Mathematics	11.1	0.0	44.4	44.4	0.0	2.78 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	20.0	20.0	20.0	3.00 (1.58)
History	14.3	14.3	0.0	14.3	57.1	2.14 (1.68)
Geography	0.0	0.0	20.0	20.0	60.0	1.60 (0.89)
Civic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	50.0	33.3	16.7	2.33 (0.82)
Physics	0.0	0.0	0.0	33.3	66.7	1.33 (0.58)
Biology	25.0	0.0	25.0	25.0	25.0	2.75 (1.71)
Human Culture	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)

Item IIA1 2f: To what extent do you feel as a teacher who implements the Omani curriculum that you have participated with your opinion, in each step of its development process: In evaluating every step of the development process.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	25.0	0.0	25.0	41.7	2.33 (1.50)
Arabic Language	33.3	26.7	20.0	0.0	20.0	3.53 (1.51)
English Language	10.5	31.6	21.1	5.3	31.6	2.84 (1.46)
Mathematics	11.1	22.2	33.3	22.2	11.1	3.00 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	0.0	25.0	25.0	25.0	25.0	2.50 (1.29)
History	0.0	14.3	28.6	14.3	42.9	2.14 (1.22)
Geography	0.0	0.0	20.0	20.0	60.0	1.60 (0.89)
Civic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	50.0	33.3	16.7	2.33 (0.82)
Physics	0.0	0.0	0.0	33.3	66.7	1.33 (0.58)
Biology	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIA1 3a: To what extent do you feel that your feedback to the designers was taken seriously and adopted in accomplishing each step: during the curriculum development process.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	16.7	8.3	33.3	25.0	2.67 (1.50)
Arabic Language	13.3	20.0	46.7	6.7	13.3	3.13 (1.19)
English Language	11.8	0.0	35.3	29.4	23.5	2.47 (1.23)
Mathematics	0.0	37.5	37.5	25.0	0.0	3.13 (0.84)
Specialized Subject Matters in The Arts						
General Sciences	0.0	25.0	25.0	25.0	25.0	2.50 (1.29)
History	0.0	16.7	16.7	0.0	66.7	1.83 (1.33)
Geography	0.0	0.0	50.0	0.0	50.0	2.00 (1.10)
Civic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	16.7	33.3	33.3	2.17 (1.17)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	0.0	25.0	25.0	25.0	25.0	2.50 (1.29)
Human Culture	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)

Item IIA1 3b: To what extent do you feel that your feedback to the designers was taken seriously and adopted in accomplishing each step: during the curriculum implementation and yearly follow up.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	8.3	25.0	41.7	16.7	2.50 (1.17)
Arabic Language	6.7	33.3	33.3	13.3	13.3	3.07 (1.16)
English Language	11.8	5.9	47.1	23.5	11.8	2.82 (1.13)
Mathematics	12.5	37.5	25.0	12.5	12.5	3.25 (1.28)
Specialized Subject Matters in The Arts						
General Sciences	0.0	25.0	25.0	0.0	50.0	2.25 (1.50)
History	0.0	28.6	28.6	0.0	42.9	2.43 (1.40)
Geography	0.0	0.0	50.0	0.0	50.0	2.00 (1.10)
Civic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	50.0	50.0	0.0	2.50 (0.55)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	0.0	0.0	50.0	50.0	0.0	2.50 (0.58)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIA1 4a: To what extent do you feel that the supervisors were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	16.7	25.0	33.3	16.7	2.67 (1.23)
Arabic Language	18.8	31.8	18.8	12.5	18.8	3.19 (1.42)
English Language	22.2	33.3	33.3	11.1	0.0	3.67 (0.97)
Mathematics	0.0	25.0	62.4	0.0	12.5	3.00 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	25.0	25.0	0.0	3.25 (0.96)
History	0.0	28.6	28.6	0.0	42.9	2.43 (1.40)
Geography	0.0	16.7	33.3	0.0	50.0	2.17 (1.33)
Civic Education	0.0	0.0	75.0	0.0	25.0	2.50 (1.00)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	16.7	16.7	33.3	16.7	2.83 (1.47)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	0.0	50.0	0.0	25.0	25.0	2.75 (1.50)
Human Culture	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)

Item IIA1 4b: To what extent do you feel that the education administrators were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	50.0	16.7	25.0	2.50 (1.17)
Arabic Language	6.3	31.3	31.3	0.0	31.3	2.81 (1.38)
English Language	12.5	31.3	25.0	12.5	18.8	3.06 (1.34)
Mathematics	0.0	0.0	37.5	37.5	25.0	2.13 (0.84)
Specialized Subject Matters in The Arts						
General Sciences	0.0	40.0	0.0	40.0	20.0	2.60 (1.34)
History	0.0	16.7	16.7	16.7	50.0	2.00 (1.27)
Geography	0.0	16.7	33.3	0.0	50.0	2.17 (1.33)
Civic Education	0.0	0.0	0.0	66.7	33.3	1.67 (0.58)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	16.7	50.0	0.0	2.83 (0.98)
Physics	0.0	0.0	0.0	66.7	33.3	1.67 (0.58)
Biology	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
Human Culture	0.0	0.0	0.0	66.7	33.3	1.67 (0.58)

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Item IIA1 4c: To what extent do you feel that the students were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.3	8.3	50.0	0.0	8.3	3.58 (1.24)
Arabic Language	0.0	12.5	25.0	31.3	31.3	2.19 (1.05)
English Language	0.0	5.9	23.5	17.6	52.9	1.82 (1.02)
Mathematics	0.0	0.0	25.0	25.0	50.0	1.75 (0.89)
Specialized Subject Matters in The Arts						
General Sciences	0.0	0.0	25.0	50.0	25.0	2.00 (0.82)
History	0.0	0.0	0.0	42.9	57.1	1.43 (0.54)
Geography	0.0	0.0	0.0	40.0	60.0	1.40 (0.55)
Civic Education	0.0	0.0	0.0	50.0	50.0	1.50 (0.58)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	16.7	50.0	33.3	1.83 (0.75)
Physics	0.0	0.0	0.0	33.3	66.7	1.33 (0.58)
Biology	0.0	25.0	0.0	25.0	50.0	2.00 (1.41)
Human Culture	0.0	0.0	0.0	33.3	66.7	1.33 (0.58)

Item IIA1 4d: To what extent do you feel that the parents were given a fair chance of participation in the curriculum development process?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.3	25.0	25.0	0.0	16.7	3.58 (1.44)
Arabic Language	6.3	6.3	25.0	18.8	43.8	2.13 (1.26)
English Language	0.0	0.0	0.0	23.5	76.5	1.24 (0.44)
Mathematics	0.0	0.0	12.5	37.5	50.0	1.63 (0.74)
Specialized Subject Matters in The Arts						
General Sciences	0.0	0.0	25.0	0.0	75.0	1.50 (1.00)
History	0.0	0.0	0.0	16.7	83.3	1.17 (0.41)
Geography	0.0	0.0	0.0	20.0	80.0	1.20 (0.45)
Civic Education	0.0	0.0	0.0	25.0	75.0	1.25 (0.50)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	16.7	33.3	50.0	1.67 (0.82)
Physics	0.0	0.0	0.0	0.0	100.0	1.00 (0.00)
Biology	25.0	0.0	0.0	25.0	50.0	2.25 (1.89)
Human Culture	0.0	0.0	0.0	33.3	66.7	1.33 (0.58)

Item IIA1 4e: To what extent do you feel that the various social groups were given a fair chance of participation in the curriculum development process?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	25.0	41.7	16.7	8.3	8.3	3.67 (1.23)
Arabic Language	18.8	12.5	12.5	18.8	37.5	2.56 (1.59)
English Language	0.0	0.0	5.9	23.5	70.6	1.35 (0.61)
Mathematics	12.5	0.0	25.0	25.0	37.5	2.25 (1.39)
Specialized Subject Matters in The Arts						
General Sciences	0.0	0.0	0.0	25.0	75.0	1.25 (0.50)
History	0.0	0.0	33.3	16.7	50.0	1.83 (0.98)
Geography	0.0	16.7	33.3	16.7	33.3	2.33 (1.21)
Civic Education	0.0	0.0	0.0	25.0	75.0	1.25 (0.50)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	28.3	50.0	50.0	1.50 (0.55)
Physics	0.0	0.0	0.0	0.0	100.0	1.00 (0.00)
Biology	0.0	25.0	0.0	25.0	50.0	2.00 (1.41)
Human Culture	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)

Item IIA1 5: To what extent do you have a clear picture of the curriculum in your subject matter from grade 1 through 12?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	0.0	25.0	75.0	1.25 (0.45)
Arabic Language	53.3	33.3	6.7	6.7	0.0	4.33 (0.90)
English Language	38.9	33.3	22.2	5.6	0.0	4.06 (0.94)
Mathematics	55.6	44.4	0.0	0.0	0.0	4.56 (0.53)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)
Geography	42.9	14.3	42.9	0.0	0.0	4.00 (1.00)
Civic Education	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIA1 6a: If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during its development? At the beginning

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	33.3	8.3	16.7	25.0	16.7	3.17 (1.59)
Arabic Language	21.4	28.6	35.7	14.3	0.0	3.57 (1.02)
English Language	0.0	14.3	35.7	7.1	42.9	2.21 (1.19)
Mathematics	11.1	22.2	22.2	33.3	11.1	2.89 (1.27)
Specialized Subject Matters in The Arts						
General Sciences	20.0	0.0	20.0	20.0	40.0	2.40 (1.67)
History	20.0	20.0	0.0	20.0	40.0	2.60 (1.82)
Geography	20.0	20.0	20.0	0.0	40.0	2.80 (1.79)
Civic Education	0.0	25.0	25.0	0.0	50.0	2.25 (1.50)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	33.3	16.7	33.3	2.33 (1.21)
Physics	33.3	0.0	0.0	0.0	66.7	2.33 (2.31)
Biology	0.0	50.0	0.0	0.0	50.0	2.50 (1.73)
Human Culture	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)

Item IIA1 6b: If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during its development? During the development process

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	27.3	9.1	27.3	9.1	27.3	3.00 (1.61)
Arabic Language	21.4	21.4	28.6	21.4	7.1	3.29 (1.27)
English Language	0.0	33.3	20.0	26.7	20.0	2.67 (1.18)
Mathematics	0.0	33.3	44.4	11.1	11.1	3.00 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	25.0	25.0	0.0	0.0	50.0	2.75 (2.06)
History	28.6	28.6	0.0	14.3	28.6	3.14 (1.77)
Geography	20.0	20.0	0.0	20.0	40.0	2.60 (1.82)
Civic Education	0.0	25.0	0.0	25.0	50.0	2.00 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Physics	33.3	0.0	0.0	0.0	66.7	2.33 (2.31)
Biology	25.0	25.0	0.0	50.0	0.0	3.25 (1.50)
Human Culture	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)

Item IIA1 6c: If you did not participate in the curriculum development process, to what extent have you been informed about this curriculum during its development? When you were asked to implement it

	Fully		Sometimes Greatly		Rarely Seldom	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	9.1	18.2	72.7	1.36 (0.67)
Arabic Language	43.8	25.0	25.0	0.0	6.3	4.00 (1.16)
English Language	12.5	50.0	25.0	0.0	12.5	3.50 (1.16)
Mathematics	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
Specialized Subject Matters in The Arts						
General Sciences	50.0	50.0	0.0	0.0	0.0	4.50 (0.54)
History	83.3	16.7	0.0	0.0	0.0	4.83 (0.41)
Geography	50.0	16.7	16.7	0.0	16.7	3.83 (1.60)
Civic Education	75.0	0.0	0.0	25.0	0.0	4.25 (1.50)
Specialized Subject Matters in The Sciences						
Chemistry	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
Physics	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Biology	100.0	0.0	0.0	0.0	0.0	5.00 (0.00)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IIA1 7a: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Defining the philosophy of curriculum development

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	18.2	0.0	18.2	54.5	9.1	2.64 (1.29)
Arabic Language	37.5	37.5	12.5	12.5	0.0	4.00 (1.03)
English Language	0.0	5.3	21.1	15.8	57.9	1.74 (0.99)
Mathematics	22.2	44.4	22.2	0.0	11.1	3.67 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	16.7	16.7	50.0	0.0	16.7	3.17 (1.33)
History	14.3	42.9	14.3	14.3	14.3	3.29 (1.38)
Geography	14.3	28.6	28.6	14.3	14.3	3.14 (1.35)
Civic Education	20.0	0.0	40.0	20.0	20.0	2.80 (1.48)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	16.7	16.7	16.7	3.00 (1.27)
Physics	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)
Biology	25.0	50.0	0.0	25.0	0.0	3.75 (1.26)
Human Culture	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)

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Item IIA1 7b: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Stating the objectives of each subject matter

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	9.1	0.0	9.1	54.5	27.3	2.09 (1.14)
Arabic Language	43.8	37.5	0.0	18.8	0.0	4.06 (1.12)
English Language	5.3	10.5	26.3	21.1	36.8	2.26 (1.24)
Mathematics	22.2	44.4	22.2	0.0	11.1	3.67 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	0.0	66.7	16.7	0.0	16.7	3.33 (1.21)
History	28.6	28.6	28.6	0.0	14.3	3.57 (1.40)
Geography	42.9	14.3	14.3	14.3	14.3	3.57 (1.62)
Civic Education	0.0	20.0	20.0	40.0	20.0	2.40 (1.14)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	0.0	0.0	16.7	3.67 (1.37)
Physics	33.3	33.3	0.0	0.0	33.3	3.33 (2.08)
Biology	0.0	75.0	0.0	0.0	25.0	3.25 (1.50)
Human Culture	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)

Item IIA1 7c: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Choosing the topics to be included

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	0.0	66.7	25.0	2.00 (1.04)
Arabic Language	31.3	56.3	6.3	6.3	0.0	4.13 (0.81)
English Language	0.0	15.8	15.8	9.9	68.4	1.79 (1.23)
Mathematics	11.1	44.4	33.3	0.0	11.1	3.44 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	33.3	0.0	16.7	3.17 (1.17)
History	28.6	14.3	28.6	0.0	28.6	3.14 (1.68)
Geography	28.6	0.0	28.6	14.3	28.6	2.86 (1.68)
Civic Education	0.0	20.0	40.0	20.0	20.0	2.60 (1.14)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	16.7	16.7	2.83 (1.17)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	25.0	25.0	25.0	0.0	25.0	3.25 (1.71)
Human Culture	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)

Item IIA1 7d: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Writing the material

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	0.0	8.3	50.0	25.0	2.33 (1.37)
Arabic Language	26.7	46.7	20.0	6.7	0.0	3.93 (0.88)
English Language	0.0	5.3	21.1	0.0	73.7	1.58 (1.02)
Mathematics	0.0	33.3	55.6	0.0	11.1	3.11 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	16.7	16.7	50.0	0.0	16.7	3.17 (1.33)
History	28.6	0.0	42.9	0.0	28.6	3.00 (1.63)
Geography	28.6	0.0	42.9	0.0	28.6	3.00 (1.63)
Civic Education	0.0	20.0	60.0	0.0	20.0	2.80 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	16.7	50.0	0.0	2.83 (0.98)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	0.0	50.0	0.0	50.0	0.0	3.00 (1.16)
Human Culture	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)

Item IIA1 7e: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Trying it out on a small scale

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	18.2	27.3	0.0	36.4	18.2	2.91 (1.51)
Arabic Language	25.0	37.5	31.3	6.3	0.0	3.81 (0.91)
English Language	10.5	10.5	36.8	10.5	31.6	2.58 (1.35)
Mathematics	0.0	22.2	44.4	22.2	11.1	2.78 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	40.0	0.0	20.0	3.20 (1.48)
History	0.0	0.0	14.3	28.6	57.1	1.57 (0.79)
Geography	0.0	0.0	14.3	42.9	42.9	1.71 (0.76)
Civic Education	0.0	0.0	40.0	40.0	20.0	2.20 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	0.0	16.7	50.0	2.17 (1.47)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	25.0	25.0	0.0	0.0	50.0	2.75 (2.06)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIA1 7f: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Evaluating the try out

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	25.0	8.3	16.7	33.3	16.7	2.92 (1.51)
Arabic Language	12.5	25.0	31.3	12.5	18.8	3.00 (1.32)
English Language	11.1	11.1	33.3	11.1	33.3	2.56 (1.38)
Mathematics	0.0	25.0	25.0	25.0	25.0	2.50 (1.20)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	40.0	0.0	20.0	3.20 (1.49)
History	0.0	12.5	12.5	25.0	50.0	1.88 (1.13)
Geography	0.0	0.0	28.6	28.6	42.9	1.86 (0.90)
Civic Education	0.0	0.0	20.0	40.0	40.0	1.80 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	16.7	16.7	50.0	2.00 (1.27)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	0.0	25.0	25.0	0.0	50.0	2.25 (1.50)
Human Culture	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)

Item IIA1 7g: To what extent do you feel that you have been given enough and timely information about the curriculum development at the following stage? Modifying the material for final version

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	16.7	25.0	33.3	8.3	3.00 (1.28)
Arabic Language	18.8	37.5	12.5	18.8	12.5	3.31 (1.35)
English Language	0.0	5.3	31.6	21.1	42.1	2.00 (1.00)
Mathematics	0.0	37.5	25.0	25.0	12.5	2.88 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	0.0	40.0	40.0	0.0	20.0	3.00 (1.23)
History	0.0	12.5	37.5	0.0	50.0	2.13 (1.25)
Geography	0.0	0.0	42.9	14.3	42.9	2.00 (1.00)
Civic Education	0.0	0.0	20.0	40.0	40.0	1.80 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	17.2	33.3	16.7	33.3	2.33 (1.21)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	25.0	0.0	50.0	0.0	25.0	3.00 (1.63)
Human Culture	0.0	0.0	0.0	33.3	66.7	1.33 (0.58)

Item IIA1 8a: The process of curriculum development continues after it had been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following: To what extent is each edition of the textbook improved in comparison with the one of the previous year.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	0.0	33.3	58.3	1.58 (0.90)
Arabic Language	25.0	50.0	6.3	12.5	6.3	3.75 (1.18)
English Language	5.3	26.3	47.4	15.8	5.3	3.11 (1.01)
Mathematics	33.3	44.4	11.1	11.1	0.0	4.00 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
History	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	20.0	20.0	0.0	60.0	0.0	3.00 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)

Item IIA1 8b: The process of curriculum development continues after it had been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following: At the end of every school year, to what extent are you asked to give your evaluation of the curriculum and your suggestions for its improvements.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	0.0	50.0	33.3	2.00 (1.04)
Arabic Language	31.3	18.8	31.3	12.5	6.3	3.56 (1.26)
English Language	11.8	23.5	23.5	23.5	17.6	2.88 (1.32)
Mathematics	0.0	37.5	37.5	25.0	0.0	3.13 (0.84)
Specialized Subject Matters in The Arts						
General Sciences	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
History	0.0	62.5	25.0	0.0	12.5	3.38 (1.06)
Geography	0.0	57.1	28.6	0.0	14.3	3.29 (1.11)
Civic Education	0.0	40.0	40.0	0.0	20.0	3.00 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	50.0	0.0	25.0	0.0	3.75 (1.26)
Human Culture	0.0	33.3	33.3	0.0	33.3	3.67 (1.53)

Item IIA1 8c: The process of curriculum development continues after it had been implemented. This results in continuous improvement of the educational materials from one year to another. To what extent do you feel that this is happening in the case of the Omani curriculum in your subject matter as indicated in the following: To what extent are you informed of the changes before it is given to you to implement.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.7	8.3	16.7	25.0	33.3	2.50 (1.51)
Arabic Language	50.0	12.5	25.0	0.0	12.5	3.88 (1.41)
English Language	10.5	36.8	21.1	15.8	15.8	3.11 (1.29)
Mathematics	11.1	33.3	22.2	11.1	22.2	3.00 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
History	12.5	25.0	50.0	0.0	12.5	3.25 (1.17)
Geography	14.3	14.3	57.1	0.0	14.3	3.14 (1.22)
Civic Education	20.0	0.0	40.0	20.0	20.0	2.80 (1.48)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	0.0	33.3	0.0	0.0	66.7	2.00 (1.73)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)

Part II Section A: Part 2
Curriculum Content: Islamic Education
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the contents of the Islamic Educational Curriculum?	11.8	45.9	20.0	14.1	8.2	3.39 (1.12)
2. To what extent are the number of weekly hours allocated for teaching curriculum sufficient for realizing the desired objectives of the Islamic Education Curriculum?	30.6	24.7	17.6	17.6	9.4	3.49 (1.34)
3. To what extent does the Islamic Education Curriculum that you teach emphasize the historical aspects of Islam?	30.1	37.3	13.3	10.8	8.4	3.70 (1.25)
4. To what extent does the Islamic Education Curriculum of the classes you teach emphasize the philosophical aspects of Islam?	23.5	44.7	14.1	10.6	7.1	3.67 (1.16)
5. To what extent does the Islamic Education Curriculum encourage the students to participate in some of the extra curricular scholastic activities - such as the Religious Club and the Quranic recitation contests?	28.2	30.6	20.0	11.8	9.4	3.57 (1.28)
6. To what extent do teachers participate in the process of developing the Islamic Education Curriculum?	20.0	29.4	25.9	9.4	15.3	3.29 (1.32)
7. To what degree is there integration among the Islamic Education Curriculum in the Primary, Preparatory, and Secondary levels?	31.3	34.9	12.0	13.3	8.4	3.68 (1.28)
8. To what extent is there integration realized between the Islamic Education Curriculum in Grades I, II, and III of the Secondary level?	29.3	41.5	4.9	13.4	11.0	3.65 (1.33)
9. To what extent is there integration, in the Omani Curricula, between Islamic Education and other subjects:						
a. Islamic Education and Arabic Language?	25.4	25.4	28.4	13.4	7.5	3.48 (1.22)
b. Islamic Education and Social Studies?	38.6	25.3	14.5	8.4	13.3	3.68 (1.41)
c. Islamic Education and Science?	22.9	24.1	28.9	14.5	9.6	3.36 (1.26)
d. Islamic Education and Mathematics?	9.8	30.5	26.8	19.5	13.4	3.04 (1.20)
e. Islamic Education and English Language?	8.9	19.0	32.9	16.5	22.8	2.75 (1.26)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent does the curriculum encourage students to understand that Islamic Education is not only an organized component of knowledge, but also a method of thinking and behaving as well?	17.5	15.0	11.2	16.2	40.0	2.54 (1.56)
11. To what extent is the practical exercise of religious worship:						
a. an integrated part of the Islamic Education Curriculum?	32.5	24.7	20.8	14.3	7.8	3.60 (1.29)
b. a basic component of the Islamic Education method?	42.9	26.2	9.5	7.1	14.3	3.76 (1.44)
12. To what extent does the Islamic Education Curriculum encourage the students to develop basic attitudes and skills necessary for critical thinking, namely:						
a. not making hasty judgments?	47.0	24.1	2.4	8.4	18.1	3.74 (1.56)
b. testing the accuracy of information?	37.6	25.9	14.1	11.8	10.6	3.68 (1.37)
c. evaluating the sources of information?	32.1	25.0	20.2	19.0	3.6	3.63 (1.22)
d. utilizing varied sources of information?	32.5	22.9	25.3	12.0	7.2	3.61 (1.26)
13. To what extent does the Islamic Education Curriculum encourage students to develop basic attitudes and skills necessary for rational thinking, namely:						
a. Deductive Reasoning: applying general principles to special cases?	27.4	31.0	22.6	14.3	4.8	3.62 (1.17)
b. Inductive Reasoning: deriving a general principle or basis from special cases?	22.4	31.8	20.0	23.5	2.4	3.48 (1.15)
14. To what extent does the Islamic Education Curriculum motivate the students to read additional Islamic references on their own?	28.9	22.9	25.3	13.3	9.6	3.48 (1.30)
15. The content of the Islamic Education Curriculum at the Secondary School Level (Grades I through III) was designed as independent study encompassing the six components of Islamic Education. To what extent do you consider that the "Separate Lessons Method" leads to the realization of the desired integration within the components of Islamic Education as stipulated in the curriculum project?	33.3	29.8	15.5	16.7	4.8	3.70 (1.23)
16. To what extent do you agree that the Islamic Education Curriculum contributed to:						
a. reinforcing the awareness and active participation as a citizen of the nation?	41.0	18.1	13.3	15.7	12.0	3.60 (1.46)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. To what extent do you agree that the Islamic Education Curriculum contributed to: (con't)						
b. emphasizing that Omani culture is based on Islamic culture?	33.3	33.3	8.6	16.0	8.6	3.67 (1.32)
17. To what extent did the Islamic Education Curricula contribute to the realization of the following:						
a. encountering the challenges of modern intellectual and cultural assimilation?	44.0	17.9	19.0	14.3	4.8	3.82 (1.27)
b. liberation of intellect from following foreign traditions and imitation phenomena?	35.8	28.4	13.6	14.8	7.4	3.70 (1.30)
c. creativity and innovation within the framework of Islamic thought?	28.0	26.8	20.7	15.9	8.5	3.50 (1.29)
18. To what extent were the developmental needs of secondary level students realized through the selection of Quranic Ayahs (Hadith) and Prophets Traditions?	33.3	29.8	17.9	10.7	8.3	3.69 (1.27)
19. To what extent did the Islamic Education Curricula contribute to establishing commitments to and exercise of functional Islamic rules?	29.8	29.8	20.2	8.3	11.9	3.57 (1.32)
20. To what extent did the Islamic Education Curricula contribute to the realization of the following:						
a. instilling the love of God Almighty in hearts?	47.1	18.8	9.4	10.6	14.1	3.74 (1.49)
b. instilling love of Prophet Muhammad and following his guidance?	47.0	21.7	2.4	13.3	15.7	3.71 (1.54)
c. instilling love for the Prophet's companions and following their guidance?	41.0	26.5	10.8	8.4	13.3	3.74 (1.42)
d. instilling pride in Islam?	41.5	20.7	12.4	8.5	15.9	3.63 (1.49)
21. To what extent did the Islamic Education Curriculum contribute to familiarizing the students with the following:						
a. social system in Islam?	31.7	28.0	19.5	12.2	8.5	3.62 (1.28)
b. political system in Islam?	28.9	19.3	28.9	15.7	7.2	3.47 (1.26)
c. economic system in Islam?	31.3	30.1	13.3	15.7	9.6	3.58 (1.34)
d. integrated educational system in Islam?	33.7	26.2	21.2	8.7	10.0	3.65 (1.30)
22. To what extent did the Islamic Education Curriculum succeed in utilizing the media, information, and examples which help achieve its objectives?	14.5	27.7	36.1	16.9	4.8	3.30 (1.07)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Part II Section A: Part 2
Curriculum Content: Arabic Language
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the educational objectives of the Sultanate taken into consideration when setting the content of the Arabic Language Curriculum for the Secondary School Level?	30.6	33.3	23.4	8.1	4.5	3.78 (1.11)
2. To what degree do you think the units of the Arabic Language Curriculum contribute to the achievement of the objectives of Arabic Language at this level?	32.4	33.3	19.8	9.9	4.5	3.79 (1.14)
3. To what degree are the numbers of weekly hours allocated for teaching the Arabic Language at your grade level sufficient for the attainment of objectives at:						
a. Grade I Secondary?	23.7	22.6	16.1	20.4	17.2	3.15 (1.44)
b. Grade II Secondary?	32.0	36.0	16.0	14.0	2.0	3.82 (1.10)
c. Grade III Secondary?	28.3	30.3	19.2	14.1	8.1	3.57 (1.26)
4. To what extent does the Arabic Language Curriculum encourage and assist students to participate in extra-curricular activities such as contests, seminars, clubs, and exhibitions?	20.6	24.3	27.1	20.6	7.5	3.30 (1.22)
5. To what extent is there an integration between units of Arabic Language Curriculum at the Secondary Level and those in the Primary and Preparatory Curricula?	17.6	26.9	32.4	15.7	7.4	3.32 (1.16)
6. To what extent does the Arabic Language Curriculum for the Secondary Level encourage the use of:						
a. modern educational media?	9.0	21.6	19.8	27.9	21.6	2.69 (1.28)
b. individual educational activities?	15.1	23.6	30.2	21.7	9.4	3.13 (1.20)
c. group educational activities?	12.7	31.4	25.5	21.6	8.8	3.18 (1.17)
7. To what extent is the content of the Arabic Language Curriculum at the Secondary Level flexible to allow the teacher to express his culture and experience and to give topics full coverage scientifically and culturally?	24.8	38.5	19.3	11.0	6.4	3.64 (1.16)
8. To what extent does the Arabic Language Curriculum help the students to achieve language skills in the following grades:						
a. Grade I Secondary?	26.5	31.6	23.5	9.2	9.2	3.57 (1.24)
b. Grade II Secondary?	23.0	44.0	23.0	7.0	3.0	3.77 (0.98)
c. Grade III Secondary?	25.0	45.0	23.0	5.0	2.0	3.86 (0.92)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
9. Some educators regard the function of the Curriculum as not only educational, but also cultural and disciplinary. To what extent does this philosophy apply to the content of the Arabic Language Curriculum at Secondary Level?	26.9	40.7	25.0	4.6	2.8	3.84 (0.97)
10. To what extent does the academic curricular content of Arabic Language permit organization of the subject-matter structure sequentially, logically, and psychologically?	15.5	27.3	34.5	16.4	6.4	3.29 (1.11)
11. To what extent does the Arabic Language Curriculum allow for integrating current developments in the scientific and knowledge domains that are relevant to the content at this level in order to improve classroom learning?	14.4	38.7	26.1	14.4	6.3	3.41 (1.10)
12. To what extent does the content of the Arabic Language Curriculum inculcate different aspects such as: concepts, skills, interests, norms, attitudes, appreciation, and methods of thinking?	22.5	36.9	27.0	10.8	2.7	3.66 (1.03)
13. To what degree do you see that the content of the Arabic Language Curriculum in all its units is adequate in preparing Secondary level students for the following:						
a. university studies?	38.4	34.8	17.9	6.3	2.7	4.00 (1.03)
b. studying at higher institutes?	36.7	33.0	22.0	6.4	1.8	3.96 (1.01)
c. life situations?	25.5	30.9	24.5	12.7	6.4	3.56 (1.19)
14. To what extent did the authors of the Arabic Language Curriculum content show clearly the following:						
a. local environment?	30.0	24.5	27.3	14.5	3.6	3.63 (1.16)
b. national environment?	26.6	33.0	29.4	9.2	1.8	3.73 (1.02)
c. Islamic environment?	42.9	28.6	17.0	8.9	2.7	4.00 (1.10)
d. social environment?	31.5	28.8	28.8	9.9	0.9	3.80 (1.03)
15. To what extent did Arabic Language Curriculum designers consider the following:						
a. the past cultural heritage of the Sultanate of Oman?	38.4	38.4	17.9	4.5	0.9	4.09 (0.91)
b. modern Omani developments?	40.0	31.8	18.2	7.3	2.7	3.99 (1.06)
16. To what degree do you see that the curriculum content allowed for individual differences among students in:						
a. Grade I Secondary?	16.8	22.1	28.4	20.0	12.6	3.11 (1.27)
b. Grade II Secondary?	15.2	33.3	28.3	16.2	7.1	3.33 (1.13)
c. Grade III Secondary?	24.2	24.2	31.6	15.8	4.2	3.48 (1.15)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent do you agree on the soundness of the scientific aspect in the content of the Arabic Language Curriculum at the Secondary Level in the following areas:						
a. reading?	31.8	39.1	18.2	8.2	2.7	3.89 (1.04)
b. literary texts?	19.8	37.8	25.2	11.7	5.4	3.55 (1.10)
c. critique and eloquence?	21.3	36.1	18.5	20.4	3.7	3.51 (1.15)
d. history of literature?	16.0	29.2	24.5	18.9	11.3	3.20 (1.25)
e. grammar and inference?	28.2	29.1	24.5	14.5	3.6	3.64 (1.15)
f. poetic rhythm?	23.1	26.9	22.1	16.3	11.5	3.34 (1.31)
18. To what extent did the following Arabic Language Units contribute to providing Secondary Level students with analytical capabilities in each of the following:						
a. reading?	26.6	40.4	18.3	9.2	5.5	3.73 (1.12)
b. literary texts?	21.5	43.0	22.4	8.4	4.7	3.68 (1.05)
c. critique and eloquence?	22.2	30.6	25.0	17.6	4.6	3.48 (1.16)
d. history of literature?	19.3	17.4	32.1	20.2	11.0	3.14 (1.26)
e. grammar and inference?	21.5	36.4	24.3	9.3	8.4	3.53 (1.18)
f. poetic rhythm?	14.8	27.8	23.1	22.2	12.0	3.11 (1.26)
19. To what extent did reading topics in Secondary Level classes help develop the reading skills in the following ways:						
a. speed reading without making mistakes?	24.5	37.3	26.4	8.2	3.6	3.71 (1.04)
b. understanding oral reading?	18.0	29.7	34.2	15.3	2.7	3.45 (1.04)
c. correct pronunciation?	24.8	35.8	27.5	10.1	1.8	3.72 (1.01)
d. appreciation and aesthetic perception of reading material?	18.5	37.0	32.4	7.4	4.6	3.57 (1.03)
e. ability to critique and to judge reading material?	12.6	29.7	35.1	18.0	4.5	3.28 (1.05)
20. To what extent is assessment of student achievement made in terms of success in meeting objectives specified by the curriculum in the following:						
a. application to students' developmental characteristics and needs?	16.2	25.2	36.0	17.1	5.4	3.30 (1.10)
b. suitability to the students' abilities and capabilities?	10.9	25.5	36.4	20.9	6.4	3.14 (1.07)
c. relation to students' experience in their daily lives?	15.5	17.3	39.1	18.2	10.0	3.10 (1.17)
d. related to the students' daily lives?	20.9	21.8	36.4	13.6	7.3	3.36 (1.17)
e. variety in topics and scope?	28.2	39.1	22.7	6.4	3.6	3.82 (1.03)
f. realization of students' functional level?	14.8	27.8	40.7	12.0	4.6	3.36 (1.03)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
21. To what extent was horizontal integration and continuity realized among curriculum topics of Arabic Language in the following classes:						
a. Grade I Secondary?	17.3	29.6	28.6	10.2	14.3	3.26 (1.27)
b. Grade II Secondary?	21.2	41.4	22.2	8.1	7.1	3.62 (1.12)
c. Grade III Secondary?	22.8	35.6	29.7	5.0	6.9	3.62 (1.10)
22. To what extent was vertical integration and continuity achieved among curriculum units of Arabic Language in the three class levels:						
a. Grade I Secondary?	24.5	29.6	25.5	10.2	10.2	3.48 (1.25)
b. Grade II Secondary?	26.1	32.6	28.3	6.5	6.5	3.65 (1.13)
c. Grade III Secondary?	17.4	40.2	29.3	7.6	5.4	3.57 (1.04)
23. To what extent were the following taken into consideration in selecting curriculum content in Arabic Language at the Secondary Level:						
a. logical scope and sequence in quantity?	10.9	23.8	35.6	15.8	13.9	3.02 (1.18)
b. logical scope and sequence in quality?	14.4	28.8	27.9	19.8	9.0	3.20 (1.18)
24. To what extent were the readings for Secondary Level classes varied and covered all aspects and domains necessary for student's cultural, religious, social, and economic growth?	35.8	29.4	22.0	8.3	4.6	3.84 (1.14)
25. To what extent were the following criteria considered in selecting reading topics in Secondary Level classes:						
a. hierarchical gradation in quantity of topics for Grade III?	18.8	29.5	27.7	19.6	4.5	3.38 (1.13)
b. hierarchical gradation in quality of topics for Grade III?	16.2	29.7	31.5	17.1	5.4	3.34 (1.11)
c. relevance to contemporary spirit and modern technological progress?	21.8	30.9	31.8	10.9	4.5	3.55 (1.09)
d. inculcation of topics that represent the originality and culture of the past?	32.4	41.7	19.4	4.6	1.9	3.98 (0.94)
26. To what extent did the Arabic Language Curriculum content in different units help:						
a. motivate students to read independently?	23.4	34.2	24.3	10.8	7.2	3.56 (1.17)
b. enrich students' vocabulary?	31.5	28.8	25.2	10.8	3.6	3.74 (1.13)
c. enhance the students' culture and expand their perceptions?	26.4	35.5	26.4	8.2	3.6	3.73 (1.06)
d. students' acquisition of skill in oral and written expression?	20.0	32.7	24.5	13.6	9.1	3.41 (1.21)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
26. To what extent did the Arabic Language Curriculum content in different units help: (cont'd)						
e. create social situations to teach language?	20.0	25.5	32.7	14.5	7.3	3.36 (1.17)
f. stimulate the motivation to learn in students?	20.9	26.4	27.3	20.0	5.5	3.37 (1.18)
27. To what extent is balance between prose and poetry texts realized in setting content of the curriculum in the following classes?						
a. Grade I Secondary?	14.7	31.6	33.7	14.7	5.3	3.36 (1.07)
b. Grade II Secondary?	24.2	34.3	30.3	7.1	4.0	3.68 (1.05)
c. Grade III Secondary?	22.1	33.7	31.6	9.5	3.2	3.62 (1.03)
28. To what degree do the selected literary texts in the three secondary level classes help develop the skills of literary oriented students and encourage them to practice these skills?	23.8	24.8	31.7	12.9	6.9	3.46 (1.19)
29. To what extent do you see that the selected literary texts contribute to:						
a. development of appreciation?	13.9	44.4	25.9	9.3	6.5	3.50 (1.06)
b. development of imagination to stimulate visualization and creativity?	16.4	37.3	28.2	10.9	7.3	3.45 (1.11)
c. acquiring self-enjoyment?	17.4	38.5	25.7	10.1	8.3	3.47 (1.14)
d. development of abilities to critique, balance, and make literary judgments?	15.1	30.2	34.9	14.2	5.7	3.35 (1.08)
30. To what degree do you see the content of the literary text curriculum appropriate in quantity and quality to students' level in the following classes:						
a. Grade I Secondary?	14.0	24.7	24.7	24.7	11.8	3.04 (1.24)
b. Grade II Secondary?	16.7	35.4	30.2	13.5	4.2	3.47 (1.06)
c. Grade III Secondary?	17.3	33.7	30.6	13.3	5.1	3.45 (1.09)
31. To what degree do you feel the content of the literary text curriculum is good as to the:						
a. distribution of the terms and topics among the three classes?	17.4	27.5	36.7	13.8	4.6	3.39 (1.07)
b. diversity of topics and literature in the three classes?	19.1	31.8	35.5	11.8	1.8	3.55 (0.99)
32. To what extent was representation of the Omani culture and literature achieved when selecting content of literary texts in the following classes:						
a. Grade I Secondary?	17.2	25.8	30.1	20.4	6.5	3.27 (1.16)
b. Grade II Secondary?	15.5	21.6	32.0	18.6	12.4	3.09 (1.23)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
32. To what extent was representation of the Omani culture and literature achieved when selecting content of literary texts in the following classes: (cont'd)						
c. Grade III Secondary?	20.9	22.0	34.1	17.6	5.5	3.35 (1.16)
33. To what extent was representation of Omani environment and literature realized in the curriculum content in the following language branches?						
a. reading?	21.4	35.0	26.2	10.7	6.8	3.53 (1.15)
b. literary texts?	10.6	29.8	27.9	24.0	7.7	3.12 (1.13)
c. critique and eloquence?	8.4	22.4	25.2	24.3	19.6	2.76 (1.24)
d. history of literature?	14.0	35.5	17.8	19.6	13.1	3.18 (1.27)
e. grammar and inference?	21.3	25.0	18.5	22.2	13.0	3.19 (1.35)
34. To what extent was balance among different literary periods realized when selecting content of literary text in the Secondary Level?	25.2	26.2	32.7	12.1	3.7	3.57 (1.11)
35. To what degree do you perceive that the amount of literary texts in each class was sufficient to differentiate between:						
a. thought characteristics of the periods it represents?	19.1	42.7	25.5	10.0	2.7	3.66 (0.99)
b. artistic characteristics of the periods it represents?	25.2	38.3	24.3	8.4	3.7	3.73 (1.05)
36. To what extent was the functional aspect of the language realized, and selected literary texts benefited from the students' daily life situations?	20.0	34.3	31.4	10.5	3.8	3.56 (1.05)
37. To what degree do you feel that the selected literary texts are appropriate for students' language skills and standards in the following classes:						
a. Grade I Secondary?	12.6	28.4	33.7	12.6	12.6	3.16 (1.19)
b. Grade II Secondary?	22.7	41.2	22.7	9.3	4.1	3.69 (1.05)
c. Grade III Secondary?	21.4	43.9	23.5	7.1	4.1	3.71 (1.02)
38. To what degree do you see that the content of the grammar and inference curriculum realizes the desired language skills in the following classes:						
a. Grade I Secondary?	19.1	24.5	29.8	12.8	13.8	3.22 (1.29)
b. Grade II Secondary?	25.0	36.0	26.0	10.0	3.0	3.70 (1.05)
c. Grade III Secondary?	20.0	37.0	31.0	10.0	2.0	3.63 (0.98)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
39. To what degree do you agree that the content of grammar and inference should include several pages from dictionary of etymology "Muj'am Al ma'ani" so that it contributes in the development of linguistic inference with Grade III Secondary students?	31.4	28.6	21.9	12.4	5.7	3.68 (1.21)
40. To what degree do you agree that the content of inflection and grammar curriculum in Secondary Level units be organized in a system inculcating similarities and isotopes appropriate to the standards of students at this level?	38.2	25.5	23.6	7.3	5.5	3.84 (1.18)
41. To what degree do you feel the following topics should be excluded from the content of grammar curriculum:						
a. sentences that cannot be parsed?	17.6	12.0	12.0	17.6	40.7	2.48 (1.54)
b. sentences that can be parsed?	19.6	9.3	10.3	18.7	42.1	2.46 (1.57)
c. meanings of some letters (harf)?	20.6	15.0	20.6	13.1	30.8	2.81 (1.52)
d. moduling?	16.8	13.1	17.8	14.0	38.3	2.56 (1.52)
e. nominative pronoun?	19.8	16.0	14.2	13.2	36.8	2.69 (1.58)
f. separating pronoun?	23.6	15.1	15.1	10.4	35.8	2.80 (1.62)
g. conjunctive and disjunctive "hamza"?	15.6	10.1	10.1	12.8	51.4	2.26 (1.54)
42. To what degree do you agree on increasing definitions and categorization in the following eloquence topics:						
a. similarizing?	39.4	19.3	15.6	8.3	17.4	3.55 (1.51)
b. exclamations for eloquence purposes?	31.2	23.9	13.8	11.0	20.2	3.35 (1.52)
c forwarding?	25.7	22.9	19.3	8.3	23.9	3.18 (1.51)
d. omitting?	23.8	26.7	13.9	8.9	26.7	3.12 (1.55)
43. To what extent do you feel that the content of the Critique Curriculum in Grades I and III help to differentiate between:						
a. characteristics of poetic arts?	26.2	40.8	18.4	8.7	5.8	3.73 (1.12)
b. characteristics of prose arts?	25.2	38.8	23.3	6.8	5.8	3.71 (1.10)
c. characteristics of different literary schools? ?	28.2	34.0	21.4	13.6	2.9	3.71 (1.11)
44. Some educators believe the content of the present eloquence ("Balagha") curriculum as it is presented in the Secondary Level leads to it standstill and confinement in frames, terms and categories, which define its separation from literary studies and departs from its real scope and function. To what degree do you agree with this opinion?	26.5	27.5	23.5	16.7	5.9	3.52 (1.22)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
45. To what extent was the content of Critique and Eloquence (" Balagha") in Secondary Level attached to modern literature as it is closer to the student's contemporary life and immediate experience?	16.4	27.3	35.5	17.3	3.6	3.36 (1.06)
46. To what degree do you see that the Critique and Eloquence curriculum emphasized a general abstraction that stimulates the intellect of the student?	25.7	23.9	31.2	11.9	7.3	3.49 (1.21)
47. To what degree do you agree that the study of Critique and Eloquence in Grade I be deleted, although students in this grade need these skills for studying, analyzing, and critiquing literary texts?	33.0	18.9	18.9	11.3	17.9	3.38 (1.49)
48. To what degree do you feel that the content of poetic rhythm "Urud" in Grades II and III (literary) are adequate to realize the objectives of the curriculum?	36.4	28.2	15.5	10.0	10.0	3.71 (1.32)
49. To what extent do you agree with deleting poetic rhythm "Urud" from Grades II and III in the scientific section?	48.2	16.4	9.1	9.1	17.3	3.69 (1.56)
50. To what extent do you feel that students benefit from the literary section in Grades II and III from studying poetic rhythms course "Urdu"?	26.2	21.5	20.6	15.9	15.9	3.26 (1.42)
51. To what degree is the content of the Critique and Eloquence Curriculum appropriate for linguistic and intellectual levels for students at this level?	21.1	45.9	15.6	11.9	5.5	3.65 (1.11)
52. To what degree are the topics of the History of Literature in Grade III Secondary in vertically integrated and coordinated with those in Grade II Secondary?	28.4	37.6	19.3	6.4	8.3	3.72 (1.19)
53. To what degree do you feel that the curriculum content of the History of Literature has a logical gradation in construction and sequence?	36.0	25.2	25.2	6.3	7.2	3.77 (1.21)
54. To what degree is the selected content of the History of Literature through different time periods adequate in giving a clear vision of:						
a. development of literature across different periods?	36.4	33.6	20.6	7.5	1.9	3.95 (1.02)
b. literary phenomena in connected periods?	34.5	34.5	20.0	6.4	4.5	3.88 (1.10)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
54. To what degree is the selected content of the History of Literature through different time periods adequate in giving a clear vision of: (cont'd)						
c. intellectual and artistic characteristics in periods of study?	29.6	31.5	29.6	4.6	4.6	3.77 (1.07)
55. To what degree do you feel the content of the History of Literature and Literary Autobiography at the Secondary Level are sufficient for:						
a. enriching students' perceptions and outlook on life?	27.1	43.0	21.5	7.5	0.9	3.88 (0.93)
b. students' understanding of life and interpretation of its events?	27.5	34.9	28.4	7.3	1.8	3.79 (0.99)
56. To what extent do you agree that the content of the History of Literature Curriculum has encompassed all literary phenomena in the different periods studied?	29.4	34.9	27.5	6.4	1.8	3.84 (0.99)
57. To what degree has the curriculum content of the History of Literature - prose and poetry - achieved balance in selected topics so that the studies give sound judgment on the history of literature in different periods?	35.8	26.6	26.6	8.3	2.8	3.84 (1.09)
58. To what degree do you feel the present content distribution of the History of Literature Curriculum should be deleted from Grade I Secondary?	25.7	31.2	21.1	10.1	11.9	3.49 (1.30)
59. To what extent do you feel that the Literary Autobiographies Curriculum contributes to leading students to famous literary characters in the present day world of literature?	34.3	39.8	19.4	3.7	2.8	3.99 (0.97)
60. To what degree do you perceive that Literary Autobiographies Curriculum draws a clear illustration of:						
a. status of the autobiographer among his literary contemporaries?	40.2	32.7	22.4	4.7	0.0	4.08 (0.90)
b. his artistic and intellectual characteristics?	34.3	44.1	17.6	2.9	1.0	4.08 (0.85)
61. To what degree do you see that the History of Literature and Literary Autobiographies Curriculum contribute to students' use of literary resources and references?	30.6	31.5	20.4	16.7	0.9	3.74 (1.10)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: English language
(Teacher)

Item IIA2	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term goals taken into consideration when setting the criteria for selecting and organizing the contents of the English Language Curriculum?	10.8	36.9	39.6	9.9	2.7	3.43 (0.91)
2. To what extent are the number of periods allocated for teaching the English Language Curriculum sufficient to realize the desired goals for the following:						
a. the 1S level students (6 periods per week)?	22.9	45.9	22.0	5.5	3.7	3.79 (0.98)
b. the 2S and 3S Arts students (8 periods per week)?	29.0	43.9	20.6	2.8	3.7	3.92 (0.97)
c. the 2S and 3S Science students (6 periods per week)?	17.4	30.3	29.4	15.6	7.3	3.35 (1.16)
3. To what extent does the content of the English Language Curriculum that you teach reflect an Omani cultural orientation?	4.3	36.2	49.1	10.3	0.0	3.35 (0.72)
4. To what degree does the English Language Curriculum of the classes you teach encourage the students to engage in extracurricular activities, e.g., clubs and contests?	2.6	10.3	52.6	30.2	4.3	2.77 (0.80)
5. To what extent is there integration of the English Language Curriculum in the Primary, Preparatory, and Secondary Schools?	13.2	46.5	28.9	7.0	4.4	3.57 (0.96)
6. To what extent is there integration of the English Language Curriculum and the other subjects' curricula:						
a. English and Islamic Studies?	1.8	10.7	23.2	29.5	34.8	2.15 (1.08)
b. English and Arabic Language?	9.2	6.4	18.3	41.3	24.8	2.34 (1.19)
c. English and Mathematics?	7.2	13.5	42.3	23.4	13.5	2.78 (1.08)
d. English and Science?	8.2	41.8	43.6	5.5	0.9	3.51 (0.76)
e. English and Social Studies?	8.9	31.3	47.3	10.7	1.8	3.35 (0.86)
7. To what extent is English Language remediation required for Omani Secondary students?	23.5	51.3	22.6	1.7	0.9	3.95 (0.78)
8. The Secondary English Language Curriculum of 2S and 3S students is designed for both the Arts and Science groups. To what extent do the core materials reflect the interest of:						
a. the Arts groups?	6.3	42.9	40.2	9.8	0.9	3.44 (0.79)
b. the Science groups?	8.2	50.0	37.3	4.5	0.0	3.62 (0.70)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
9. To what degree does the English Language Curriculum content encourage the students to think creatively and to be independent thinkers?	1.7	27.6	42.2	21.6	6.9	2.96 (0.92)
10. To what extent does the English Language Curriculum encourage the students to develop the basic skills necessary for rational thought - namely:						
a. deductive reasoning: applying general principles to special cases?	2.6	25.4	51.8	17.5	2.6	3.08 (0.80)
b. inductive reasoning: deriving a general principle or basis from special cases?	2.7	22.1	51.3	21.2	2.7	3.01 (0.81)
11. To what extent is the English Language Curriculum flexible enough to permit all English Language teachers to input their individual cultural experiences?	3.5	19.3	47.4	20.2	9.6	2.87 (0.96)
12. To what degree is the vocabulary introduced at each grade of the Secondary Level of the English Language Curriculum:						
a. quantitatively sufficient to attain the goals of the English Language Curriculum?	6.1	50.0	36.8	6.1	0.9	3.54 (0.74)
b. too difficult for the students' cultural and cognitive level?	6.2	23.0	46.9	19.5	4.4	3.07 (0.92)
13. To what extent does the English Language Curriculum content cover specialized vocabulary and topics from a multitude of language domains to enable the student to communicate effectively in respect to:						
a. the personal domain?	7.2	43.2	45.0	4.5	0.0	3.53 (0.70)
b. the social domain?	6.1	33.0	50.4	9.6	0.9	3.34 (0.77)
c. the national domain?	7.1	30.1	46.9	15.0	0.9	3.27 (0.84)
d. the international domain?	2.7	23.9	46.0	23.9	3.5	2.98 (0.86)
e. the scientific domain?	1.7	31.3	45.2	20.9	0.9	3.12 (0.79)
f. the literary and cultural domain?	3.5	18.4	46.5	25.4	6.1	2.88 (0.90)
g. the geo-political domain?	0.9	13.3	34.5	30.1	21.2	2.43 (1.00)
14. To what extent is "formal grammar" covered in the Secondary English Language Curriculum?	5.2	16.5	33.9	32.2	12.2	2.70 (1.05)
15. To what extent do you think that "formal grammar" should be covered in the Secondary English Language Curriculum?	21.4	44.4	24.8	7.7	1.7	3.76 (0.93)
16. To what extent is the grammar introduced at the Secondary Level of English Language Curriculum:						
a. mechanistic?	7.1	32.7	42.5	14.2	3.5	3.26 (0.91)
b. thought provoking?	0.9	31.6	33.3	23.9	10.3	2.89 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent does the workbook "Writing Tasks" help the English language students to develop useful writing skills?	7.0	26.1	37.4	27.0	2.6	3.08 (0.96)
20. To what extent are English Language class cassettes useful to teachers and students in:						
a. providing good pronunciation models?	17.4	33.9	32.2	10.4	6.1	3.46 (1.09)
b. promoting and practicing listening comprehension?	13.0	55.7	22.6	5.2	3.5	3.70 (0.89)
c. presenting difficult materials such as dialogues and songs?	15.8	39.5	26.3	10.5	7.9	3.45 (1.12)
19. To what extent are the students encouraged to borrow or make their own copies of the English Language class cassettes so that they may practice on their own at home?	6.1	13.0	31.3	20.9	28.7	2.47 (1.21)
20. To what extent do the English Language class cassettes present problems; in that, the listening passages:						
a. are too long?	5.2	29.6	49.6	12.2	3.5	3.21 (0.85)
b. are spoken too rapidly?	11.3	43.5	35.7	9.6	0.0	3.57 (0.82)
c. are too complex?	5.2	20.0	54.8	17.4	2.6	3.08 (0.83)
d. present an unsuitable topic?	1.8	21.2	36.3	26.5	14.2	2.70 (1.02)
e. must be played more than twice before there is any comprehension?	26.5	40.7	28.3	3.5	0.9	3.89 (0.87)
21. To what extent are films and videos used in achieving the goals of the English Language Curriculum?	1.8	11.7	13.5	12.6	60.4	1.82 (1.16)
22. To what extent are the English language study texts useful in:						
a. improving the student's silent reading speed and comprehension?	6.1	61.7	23.5	6.1	2.6	3.63 (0.80)
b. providing contextual examples of new structural and functional language?	3.5	41.7	40.0	13.0	1.7	3.32 (0.81)
c. increasing the student's vocabulary?	5.3	59.6	28.1	6.1	0.9	3.62 (0.72)
d. offering materials for listening and discussion as well as controlled oral and written work?	6.1	53.5	28.1	12.3	0.0	3.54 (0.79)
23. To what extent are the "Reading for Information Texts" in the English Language Curriculum useful in:						
a. simulating articles and stories from newspapers or magazines?	2.6	42.2	44.8	7.8	2.6	3.35 (0.77)
b. encouraging students' rapid silent reading of quite difficult texts for extracting the main points and factual information?	1.8	50.0	42.1	5.3	0.9	3.47 (0.67)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

1n30

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
24. To what extent are the "Check Your Understanding" exercises in the English Language Curriculum useful for checking the student's understanding of the Serial Story?	13.3	42.5	34.5	7.1	2.7	3.57 (0.91)
25. To what extent are the "Reading Passages" in the Secondary English Language Curriculum sufficiently authentic and up-to-date?	10.5	51.8	35.1	2.6	0.0	3.70 (0.69)
26. To what extent would you rate the "Reading for pleasure" passages at the Secondary Level of the English Language Curriculum effective in "inducing pleasurable reading"?	5.2	25.2	50.4	14.8	4.3	3.12 (0.88)
27. To what extent is the English Language Curriculum component "Paul's Tall Stories" understood by and beneficial to Omani students?	1.7	25.2	41.7	25.2	6.1	2.91 (0.90)
28. To what extent is it desirable "to chunk":						
a. listening passages?	10.6	36.3	35.4	11.5	6.2	3.34 (1.02)
b. reading passages?	8.8	36.8	36.0	10.5	7.9	3.28 (1.04)
29. To what extent do the "tasks" (as suggested in the teacher's manuals and student's book of the English Language Curriculum) lead to better understanding of the "Reading Passages" by the students?	3.5	42.1	47.4	7.0	0.0	3.42 (0.68)
30. To what extent is the "anaphoric reference" a useful technique to:						
a. teach reading?	9.9	39.6	43.2	5.4	1.8	3.51 (0.82)
b. test reading?	9.5	49.5	36.8	4.2	0.0	3.64 (0.71)
31. To what extent is the "cloze" methodology effective in the English Language Curriculum as:						
a. cloze passages for teaching?	5.0	35.0	42.0	13.0	5.0	3.22 (0.92)
b. cloze tests?	8.0	46.0	34.0	9.0	3.0	3.47 (0.88)
32. To what extent does the Secondary English Language Curriculum provide students with sufficient basic competence to be able to use English in their lives and work as the need arises:						
a. in reading?	8.0	39.8	38.9	10.6	2.7	3.40 (0.88)
b. in writing?	7.8	20.0	38.3	27.0	7.0	2.95 (1.03)
c. in listening?	9.6	33.9	41.7	13.0	1.7	3.37 (0.89)
d. in speaking?	3.5	31.0	38.9	21.2	5.3	3.06 (0.94)
e. in comprehension?	5.3	54.9	31.0	8.8	0.0	3.57 (0.73)
33. To what extent are the various skills areas integrated in the Secondary English Language Curriculum?	15.7	48.7	31.3	4.3	0.0	3.76 (0.77)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
34. To what extent does the English Language Curriculum content enable the students to master the following skills:						
a. understanding continuous speech of three minutes duration at a near native-speaker speed of delivery on a familiar topic?	6.9	17.2	56.9	13.8	5.2	3.07 (0.89)
b. follow the logical sequences of an argument on a common topic?	2.6	15.7	48.7	24.3	8.7	2.79 (0.90)
c. comprehend telephone conversations making arrangements or requesting information?	8.6	29.3	41.4	15.5	5.2	3.21 (0.98)
d. follow the main points of an English language news broadcast on local television?	3.5	15.8	43.9	28.9	7.9	2.78 (0.93)
e. interrupt and ask questions during a short lecture or informal talk?	2.6	8.8	41.2	36.8	10.5	2.56 (0.89)
f. agree or disagree with a fluent speaker in an informal situation?	3.5	15.8	37.7	34.2	8.8	2.71 (0.96)
g. express facts and opinions in a clear, logical sequence?	5.2	12.9	37.1	34.5	10.3	2.68 (1.00)
h. summarize materials read at the level of the English Language course book?	1.8	13.2	45.6	29.8	9.6	2.68 (0.89)
i. converse with a fluent speaker on topics relating to his/her experience?	2.6	15.5	33.6	37.9	10.3	2.62 (0.96)
j. skim extended texts and extract important and relevant information?	1.7	28.7	43.5	23.5	2.6	3.04 (0.84)
k. distinguish fact from opinion?	0.0	14.2	40.7	30.1	15.0	2.54 (0.92)
l. deduce the meaning of a passage in which only 80% of the vocabulary is familiar?	0.9	39.7	34.5	21.6	3.4	3.13 (0.88)
m. read handwritten social and business letters?	0.9	16.7	38.6	28.1	15.8	2.59 (0.98)
n. read and understand telexes?	1.8	14.3	26.8	33.0	24.1	2.37 (1.06)
o. read and understand instruction manuals, such as car manuals or hair dryer leaflets?	2.7	15.9	37.2	27.4	16.8	2.60 (1.03)
p. read timetables, tourist information, and simple street maps?	7.0	33.3	44.7	11.4	3.5	3.29 (0.89)
q. read the daily newspaper with comprehension?	3.4	13.8	36.2	31.9	14.7	2.60 (1.01)
r. write short social or business letters in the appropriate tone and form?	4.3	20.0	35.7	26.1	13.9	2.75 (1.07)
s. write logically coherent narrative prose of 200 to 300 words?	3.4	10.3	29.9	31.6	24.8	2.36 (1.07)
t. write instructions and short reports?	1.7	16.2	40.2	29.9	12.0	2.66 (0.95)
u. summarize the main points of a talk or written text at grade level?	3.4	14.5	31.6	39.3	11.1	2.60 (0.98)
v. develop library skills to locate books, look up words in a dictionary, and extract relevant information from a reference book?	1.0	19.0	41.0	19.0	20.0	2.62 (1.04)
w. read for enjoyment a novel appropriate to the grade level of the student?	2.0	15.2	49.5	22.2	11.1	2.75 (0.92)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
35. To what extent does the Secondary English Language Curriculum prepare students for life after school to:						
a. study at Sultan Qaboos University or universities abroad?	3.0	22.0	49.0	19.0	7.0	2.95 (0.90)
b. obtain jobs in the Omani national private sector?	5.3	27.2	53.5	10.5	3.5	3.20 (0.83)
c. obtain jobs in the Omani government sector?	8.0	31.0	46.0	12.4	2.7	3.29 (0.88)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Mathematics Curriculum Content
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the contents of the Secondary Mathematics Curriculum?	15.5	43.6	31.8	4.5	4.5	3.61 (0.96)
2. To what extent are the number of weekly hours allocated for teaching the curriculum sufficient for realizing the desired goals of the Mathematics Curriculum?	40.2	33.9	17.0	5.4	3.6	4.02 (1.06)
3. To what extent does the Mathematics Curriculum encourage students to participate in extracurricular scholastic activities such as clubs, contests, and science fairs?	9.1	31.8	30.9	19.1	9.1	3.13 (1.11)
4. To what extent is there vertical integration of the Mathematics Curriculum content in the Primary, Preparatory, and Secondary Levels?	9.2	42.2	29.4	11.9	7.3	3.34 (1.05)
5. To what extent is there integration and continuity of the Mathematics Curriculum in the Primary, Preparatory, and Secondary levels?	16.2	41.4	27.9	11.7	2.7	3.57 (0.99)
6. To what extent is there integration of the Mathematics Curriculum and other subjects' curricula of the same level?	10.8	27.9	35.1	16.2	9.9	3.14 (1.12)
7. To what extent does the Mathematics subject-matter help students to develop the attitudes and habits essential for logical thinking:						
a. Inductive reasoning: integrating the rules governing special cases and problems to arrive at a general rule?	27.9	41.4	16.2	9.9	4.5	3.78 (1.10)
b. Deductive reasoning: applying general principles to a specific situation or case?	32.1	37.5	17.9	8.9	3.6	3.86 (1.08)
8. To what extent does the Mathematics Curriculum encourage the students to develop attitudes and basic skills necessary for critical thinking:						
a. suspending judgement?	40.2	31.3	21.4	5.4	1.8	4.03 (1.00)
b. testing the accuracy of data?	30.6	32.4	24.3	9.9	2.7	3.78 (1.07)
c. evaluating sources of data?	22.7	30.9	30.0	12.7	3.6	3.56 (1.09)
d. utilizing various sources of information?	23.4	27.1	26.2	16.8	6.5	3.44 (1.21)
9. To what extent does the Mathematics Curriculum at the Secondary Level use different instructional media?	9.3	30.6	36.1	17.6	6.5	3.19 (1.04)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent does the Mathematics Curriculum allow the students to perform different activities in order to strengthen mathematical concepts?	8.1	32.4	32.4	19.8	7.2	3.14 (1.06)
11. To what extent did the curriculum allow you to benefit from feedback?	12.5	32.7	29.8	18.3	6.7	3.26 (1.11)
Mathematical Construction						
12. To what degree do you feel that evaluation measurements for different units of Mathematics at the Secondary Level were appropriate?	6.7	41.9	34.3	10.5	6.7	3.31 (0.98)
13. To what extent did the Mathematics Curriculum at the Secondary Level contribute to student's acquisition of different points of view that would make him able to:						
a. deduce generalizations and re-confirm the soundness of his deductions?	16.2	47.6	20.0	11.4	4.8	3.59 (1.04)
b. integrate concepts included in the generalizations?	8.4	39.3	34.6	13.1	4.7	3.34 (0.97)
14. To what extent did the Mathematics Curriculum at the Secondary Level emphasize the student's understanding of logarithms before stressing the required skill?	11.2	39.3	33.6	9.3	6.5	3.39 (1.03)
15. To what extent did the Secondary Mathematics Curriculum consider acquisition of skills related to:						
a. interpretation of charts and graphs?	19.8	45.0	19.8	9.9	5.4	3.64 (1.08)
b. skills of drawing operations flow charts?	17.9	33.0	27.7	12.5	8.9	3.38 (1.18)
Mathematical Procedures						
16. To what extent did the Secondary Mathematics Curriculum consider principles of logic in deducing mathematical theories in the three grades?	9.3	41.1	35.5	10.3	3.7	3.42 (0.93)
17. To what extent does the Secondary Mathematics Curriculum consider inductive procedures in students' acquisition of mathematical knowledge?	3.6	44.6	37.5	11.6	2.7	3.35 (0.84)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Learning and Teaching Mathematics						
18. To what extent did the curriculum contribute to the realization of self-learning principles through:						
a. encouragement of presenting cases which student analyzes and arrives at generalizations by himself?	11.9	34.9	33.9	11.9	7.3	3.32 (1.07)
b. encouragement of the extra-curricular mathematics activities?	5.5	23.6	36.4	20.9	13.6	2.86 (1.10)
c. develop desire to continue studying mathematics?	9.8	38.2	24.5	19.6	7.8	3.23 (1.12)
19. To what extent does Secondary Mathematics Curriculum allow employment of mathematical information in the student's daily life so as to provide the motivation for further learning?	8.3	35.2	34.3	15.7	6.5	3.23 (1.03)
Mathematical Usages						
20. To what extent did the Secondary Mathematics Curriculum encourage students to study mathematics and develop positive attitudes towards:						
a. continuation of mathematical studies?	5.9	45.1	30.4	12.7	5.9	3.32 (0.98)
b. use in daily problem solving?	2.0	31.4	33.3	27.5	5.9	2.96 (0.95)
c. assist in understanding other fields of knowledge?	5.6	42.1	29.0	17.8	5.6	3.24 (1.00)
The Omani Secondary Level Mathematics Curriculum consists of several units for each grade as follows:						
Mathematics Curriculum Grade 1 Secondary						
21. To what extent does the time schedule (6 weekly hours) accommodate the curriculum content of Grade 1 Secondary?	38.8	32.0	17.5	7.8	3.9	3.94 (1.11)
22. To what extent could the Logic Unit in Mathematics be considered appropriate for Grade 1 Secondary from the following aspects:						
a. concepts, terminologies, and symbolization?	29.1	37.9	23.3	7.8	1.9	3.85 (1.00)
b. generalizations?	17.3	38.8	33.7	10.2	0.0	3.63 (0.89)
c. algorithms and skills?	15.7	47.1	23.5	12.7	1.0	3.64 (0.93)
d. exercises and applications?	16.7	37.3	26.5	12.7	6.9	3.44 (1.12)
23. To what extent is there cohesion between units of "correlations and functions" and material previously studied in the Preparatory level?	32.7	38.6	19.8	4.0	5.0	3.90 (1.06)
24. To what degree do you feel you need Algebra of sets in teaching Secondary Grade 1 Curriculum so that they can be employed in the unit of probability?	37.5	33.7	18.3	8.7	1.9	3.96 (1.04)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

1986

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
25. To what degree were student's responses to the curriculum's demonstrations of each of the following:						
a. non-congrency (inequality) relations?	19.0	42.0	23.0	11.0	5.0	3.59 (1.07)
b. congrency relations?	36.0	40.0	17.0	5.0	2.0	4.03 (0.96)
c. part-sequential relations?	24.8	48.5	17.8	5.0	4.0	3.85 (0.98)
d. full sequential relations?	27.7	45.5	18.8	4.0	4.0	3.89 (0.99)
26. To what degree do you consider the importance of the following being included in the curriculum:						
a. partition?	24.2	38.4	18.2	16.2	3.0	3.65 (1.11)
b. classes of equivalence?	26.3	33.3	24.2	12.1	4.0	3.66 (1.12)
27. To what extent did the Secondary Grade 1 Mathematics Curriculum contribute to students' acquisition of accuracy in applying the algorithms to transfer from one number systems to another?	31.0	40.0	23.0	5.0	1.0	3.95 (0.91)
28. To what degree do you feel that solid geometry in Grade 1 Secondary is sufficient to make the student capable of visualizing forms in space?	8.8	33.3	24.5	17.6	15.7	3.02 (1.23)
29. To what degree are prismatic and solid models applied in teaching solid geometry?	14.0	28.0	24.0	20.0	14.0	3.08 (1.27)
30. To what extent do you feel it is appropriate to start teaching probability in Grade 1 Secondary?	15.3	29.6	38.8	10.2	6.1	3.38 (1.06)
Grade 2 Science Section						
31. To what degree do you feel that the curriculum teaching plan (8 weekly hours) is appropriate?	60.2	30.7	5.7	2.3	1.1	4.47 (0.80)
32. To what degree do you feel that the topic limits of progression in Grade 2 Scientific should:						
a. remain as it is?	31.0	25.0	20.2	16.7	7.1	3.56 (1.28)
b. be raised to higher level?	16.0	13.6	24.7	19.8	25.9	2.74 (1.40)
c. be deleted?	6.3	7.6	16.5	12.7	57.0	1.94 (1.27)
33. To what degree do you feel that the Ring Theory should:						
a. remain as it is?	33.3	34.5	25.0	3.6	3.6	3.91 (1.03)
b. be deleted?	6.1	7.3	9.8	22.0	54.9	1.88 (1.22)
34. To what extent does the Secondary Mathematics Curriculum succeed in presenting the unit of complex numbers?	25.8	44.9	19.1	4.5	5.6	3.81 (1.05)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
35. To what extent does the geometry part of the Mathematics Curriculum of Class II Secondary succeed in demonstrating the following units:						
a. analytic geometry (the circle)?	19.8	58.2	16.5	3.3	2.2	3.90 (0.83)
b. vectors?	26.7	40.0	25.6	5.6	2.2	3.83 (0.96)
c. trigonometric functions?	34.4	47.8	14.4	3.3	0.0	4.13 (0.78)
36. To what extent is there coherence between algebra and geometry in Grade 2 Secondary?	12.9	37.6	38.8	7.1	3.5	3.49 (0.93)
37. To what degree do you feel that the structure of Algebra in Grade 2 Secondary is logically sound in the sequence of its items and units?	20.7	48.3	18.4	10.3	2.3	3.75 (0.98)
38. To what degree do you feel there is wider scope in the present unit of geometry of transformations to what was previously studied by the student in preparatory level?	30.7	36.4	23.9	6.8	2.3	3.86 (1.01)
Grade 3 Science Section						
39. To what degree do you feel that curriculum-teaching plan for Grade 3 Science Section (8 weekly hours) is sufficient?	55.3	25.5	11.7	5.3	2.1	4.27 (1.01)
40. To what degree do you see that introduction to limits and continuity is appropriate?	15.8	42.1	23.2	15.8	3.2	3.52 (1.04)
41. To what degree do you agree that teaching the definition of the limit at a point is important?	28.0	41.9	17.2	7.5	5.4	3.80 (1.10)
42. To what degree do you see the student has benefited from studying derivatives in differentiation applications?	30.5	37.9	17.9	8.4	5.3	3.80 (1.13)
43. To what degree is there integration in the curriculum among maxima, regression and inflection points in the curve of a function f (x)?	18.1	54.3	19.1	5.3	3.2	3.79 (0.91)
44. To what degree do you feel there is logical sequence in topics of the unit on differentiation?	19.4	48.4	19.4	6.5	6.5	3.68 (1.07)
45. To what degree are the present theories included in the curriculum important for Grade 3 Scientific?	22.6	40.9	28.0	8.6	0.0	3.77 (0.90)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
46. To what extent is the unit of conical sections integral to what has been studied in Analytic Geometry, and geometry of transformations?	16.7	46.9	21.9	9.4	5.2	3.60 (1.04)
47. To what degree do you feel that partition is a good introduction to integration?	30.5	32.6	28.4	6.3	2.1	3.83 (1.01)
48. To what degree do you feel that the curriculum has achieved objectives of teaching functions topics?	16.8	44.2	25.3	10.5	3.2	3.61 (0.99)
49. To what degree do you feel that integrability (Reman test) of function is appropriate to students abilities and should:						
a. stay as it is?	20.0	24.4	18.9	22.2	14.4	3.13 (1.36)
b. be deleted completely?	15.9	14.6	12.2	15.9	41.5	2.48 (1.53)
50. To what degree do you feel that complete function is appropriate to student abilities in Grade 3 Science section?	18.7	36.3	34.1	4.4	6.6	3.56 (1.06)
51. To what degree do you feel that integration applications are sufficient and appropriate (areas and volumes)?	21.3	48.9	21.3	6.4	2.1	3.81 (0.92)
52. To what extent was the curriculum successful in relating experimental applications of differentiation and integration (calculus)?	15.1	45.2	30.1	5.4	4.3	3.61 (0.96)
53. To what degree do you feel that the following exist in the Probability Curriculum for Grade 3 Scientific:						
a. topic - sequence?	38.9	38.9	13.7	4.2	4.2	4.04 (1.04)
b. no pit-falls?	26.7	30.0	23.3	10.0	10.0	3.53 (1.27)
54. To what degree do you feel that the Mathematics Curriculum especially probability in Grade 3 science section needs the algebra of sets?	34.4	28.0	20.4	8.6	8.6	3.71 (1.27)
55. To what degree do you feel that probability curriculum is useful to the student in his academic life?	34.0	42.6	16.0	3.2	4.3	3.99 (1.01)
56. To what degree do you feel that the Statistics Curriculum is integrative in its topics, and the topics are in logical sequence?	34.4	33.3	20.4	6.5	5.4	3.85 (1.13)
57. To what extent was the curriculum successful in presenting the statistics unit from the following aspects:						
a. percentile and percentile rank?	17.0	38.3	27.7	10.6	6.4	3.49 (1.10)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
57. To what extent was the curriculum successful in presenting the statistics unit from the following aspects: (cont'd)						
b. actual parameters to classes?	29.3	37.0	19.6	9.8	4.3	3.77 (1.11)
c. dispersion and its measures?	37.2	38.3	16.0	5.3	3.2	4.01 (1.02)
d. regression and line of regression?	19.4	38.7	28.0	8.6	5.4	3.58 (1.07)
e. distribution of averages?	16.1	31.2	34.4	9.7	8.6	3.37 (1.13)
58. To what degree do you feel there are short comings in the structure of the Calculus Curriculum in the following aspects:						
a. graphical illustrations?	12.9	25.8	33.3	21.5	6.5	3.17 (1.11)
b. varieties of examples?	18.5	31.5	21.7	17.4	10.9	3.29 (1.26)
c. direct exercises?	14.9	29.9	26.4	16.1	12.6	3.18 (1.24)
d. hierarchical and varieties of problems?	21.8	25.3	27.6	13.8	11.5	3.32 (1.28)
59. To what degree do you feel the absence of some topics - such as partial fractions in Grade 3 Secondary?	23.1	27.5	27.5	15.4	6.6	3.45 (1.20)
60. To what extent do you agree there are shortcomings in the structure of the Probability Curriculum for Grade 3 Science section?	7.4	23.4	24.5	26.6	18.1	2.76 (1.22)
61. To what degree do you feel there are shortcomings in the structure of the Statistics Curriculum for Grade 3 Science section?	7.3	26.0	28.1	19.8	18.8	2.83 (1.22)
62. To what degree do you feel that the addition of the following topics at the Secondary level are important: partial fractions and mathematical deductions?	26.6	31.9	27.7	11.7	2.1	3.69 (1.06)
Grade 2 Art Section						
63. To what extent are the weekly hours allocated for teaching (2 hours) sufficient for realizing the desired goals of the curriculum?	17.4	22.8	17.4	21.7	20.7	2.95 (1.41)
64. To what degree do you feel that content of the units of powers and logarithms is appropriate in Grade 2 and should:						
a. stay as it is?	37.4	33.0	15.4	7.7	6.6	3.87 (1.20)
b. be deleted?	8.1	4.7	5.8	18.6	62.8	1.77 (1.25)
65. To what degree do you feel that linear programming is appropriate to the abilities of Grade 2 literary and should:						
a. stay as it is?	7.8	28.9	22.2	14.4	26.7	2.77 (1.33)
b. be deleted?	30.0	11.1	13.3	20.0	25.6	3.00 (1.60)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Grade 3 Art Section						
66. To what degree do you feel that time allotted to teaching Mathematics to Grade 3 Literary (2 weekly hours) is adequate?	9.8	13.0	20.7	21.7	34.8	2.41 (1.34)
67. To what extent do you feel that differentiation is important to Grade 3 Literary students?	15.9	37.5	33.0	11.4	2.3	3.53 (0.97)
68. To what degree do you feel that the topics of probability and statistics are necessary for students?	32.6	32.6	26.3	7.4	1.1	3.88 (0.99)
69. To what degree is there continuity and integration in the Mathematics Curriculum for Grade 3 Literary?	9.6	30.9	42.6	11.7	5.3	3.28 (0.98)
70. To what degree do you feel that the Mathematics Curriculum for Grade 3 Literary is lacking for some topics?	11.6	22.1	26.3	16.8	23.2	2.82 (1.33)
71. To what extent does the Mathematics Curriculum content for Grade 3 Literary achieve individual-learning principles?	6.3	17.9	34.7	28.4	12.6	2.77 (1.09)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: General Science
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were long-term objectives considered in selecting items that tested the General Science Curriculum content at secondary level?	16.7	40.0	33.3	10.0	0.0	3.63 (0.89)
2. To what extent were weekly hours allocated for teaching the General Science Curriculum sufficient to achieve desired objectives in Omani Curriculum?	40.0	26.7	13.3	10.0	10.0	3.77 (1.36)
3. To what extent does General Science Curriculum for the class you teach emphasize historical aspects of science?	16.7	36.7	33.3	13.3	0.0	3.57 (0.94)
4. To what extent does the General Science Curriculum encourage students to participate in specific activities such as: science club, contests, and science fairs?	13.3	33.3	30.0	20.0	3.3	3.33 (1.06)
5. To what extent is integration illustrated in the curriculum content of science subject-matter in Grades 2 and 3?	13.3	23.3	40.0	20.0	3.3	3.23 (1.04)
6 To what extent is there integration of the curricula content of science subject-matters in primary, preparatory, and secondary levels?	20.0	26.7	43.3	10.0	0.0	3.57 (0.94)
7. To what extent do curriculum content and processes encourage students to understand that scientific information is both a systematic organization of knowledge and a way of thinking?	26.7	30.0	26.7	13.3	3.3	3.63 (1.13)
8. To what extent are experiments and field studies:						
a. an integrative part of the General Science Curriculum?	20.0	30.0	40.0	6.7	3.3	3.57 (1.01)
b. a basic part of the methodology of science education?	37.9	27.6	27.6	3.4	3.4	3.93 (1.07)
9. To what extent does the Science Curriculum help students' development of the following critical-thinking attitudes and basic habits:						
a. postpone judgement?	17.2	44.8	24.1	10.3	3.4	3.62 (1.02)
b. test accuracy of data?	30.0	20.0	43.3	3.3	3.3	3.70 (1.06)
c. evaluate data sources?	16.7	30.0	33.3	13.3	6.7	3.37 (1.13)
d. use of several information sources?	26.7	26.7	30.0	10.0	6.7	3.57 (1.19)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent does the Science Curriculum help students develop logical thinking skills and the use of this style of thinking concerning the following:						
a. deduction: use and application of a general principle to a group of specific situations and examples?	23.3	36.7	26.7	13.3	0.0	3.70 (0.99)
b. induction: inference of a general principle from analysis and case-study of specific?	16.7	40.0	36.7	6.7	0.0	3.67 (0.84)
11. A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives:						
a. develop student's concern for his natural environment?	24.1	41.4	20.7	13.8	0.0	3.76 (0.99)
b. help students understand their natural environment and interpret its phenomena?	23.3	30.0	36.7	10.0	0.0	3.67 (0.96)
c. adapt to continuing changes in the natural environment?	13.8	34.5	41.4	10.3	0.0	3.52 (0.87)
d. identify natural resources in Arabic environment in general and Oman in particular?	28.6	35.7	28.6	7.1	0.0	3.86 (0.93)
e. perceive the role that natural resources play in raising the living standard for both the individual and society?	23.3	30.0	43.3	3.3	0.0	3.73 (0.87)
f. identify danger and hazards of pollution and how they could participate in protecting their environment from these dangers?	33.3	33.3	30.0	3.3	0.0	3.97 (0.89)
g. develop desired scientific attitudes towards the following:						
1. open-mindedness and inquisitiveness?	13.8	37.9	34.5	13.8	0.0	3.52 (0.91)
2. postponing judgement until they have collected all relevant information?	14.3	28.6	35.7	17.9	3.6	3.32 (1.06)
3. disproving myths and emphasizing cause-effect?	36.7	23.3	30.0	3.3	6.7	3.80 (1.19)
4. adopting experimental procedures as means of knowledge development?	30.0	30.0	26.7	10.0	3.3	3.73 (1.11)
5. precise observation?	25.9	33.3	22.2	11.1	7.4	3.59 (1.22)
6. respect for the opinions of others and readiness to change personal opinion in light of new information?	13.8	41.4	27.6	13.8	3.4	3.48 (1.02)
7. cooperation and ability of individual to work in a group?	25.0	28.6	28.6	14.3	3.6	3.57 (1.14)
8. independence in thinking and work?	13.8	37.9	27.6	6.9	13.8	3.31 (1.23)
h. learning scientific-method thinking and developing habit of using this method in solving everyday problems?	21.4	25.0	35.7	14.3	3.6	3.46 (1.11)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
11. A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives: (cont'd)						
i. develop students' appreciation and respect for manual work and its role in social progress?	16.7	36.7	30.0	13.3	3.3	3.50 (1.04)
j. develop students' appreciation of the efficiency of the universe as a system and to appreciate the natural beauty that affects the greatness of the Almighty God?	40.0	43.3	16.7	0.0	0.0	4.23 (0.73)
k. discover and develop creative abilities of the students?	17.2	34.5	37.9	10.3	0.0	3.59 (0.91)
l. discover and develop scientific attitude of the students?	13.8	34.5	41.4	10.3	0.0	3.52 (0.87)
m. develop the proper hygiene habits that enhance their natural physical growth through:						
1. identifying the various parts of the body and how they function to achieve physical growth?	14.8	51.9	33.3	0.0	0.0	3.82 (0.68)
2. identifying the proper nutritional habits and rules to protect themselves against diseases?	23.3	43.3	26.7	6.7	0.0	3.83 (0.87)
n. develop scientific reading habits as a way of self-learning?	23.3	26.7	33.3	16.7	0.0	3.57 (1.04)
o. develop manipulative skills through using standard equipment and also through designing and making simple tools and equipment needed to study science?	10.3	44.8	34.5	10.3	0.0	3.55 (0.83)
12. Several independent units of biology, geology, physics, and chemistry are included in the General Science Curricula of Grades 2 and 3 Secondary. To what degree do you feel that this process of educational material organization supplies the student with the integrative scientific knowledge required?	10.3	41.4	41.4	6.9	0.0	3.55 (0.78)
13. To what degree do you feel that the General Science Curriculum for grades 2 and 3 encourages the development of the following skills:						
a. fondness for and preference of study of science?	7.4	37.0	44.4	11.1	0.0	3.41 (0.80)
b. application of knowledge to everyday life situations?	21.4	17.9	32.1	25.0	3.6	3.29 (1.18)
c. manipulation and implementation of instruments and apparatus?	14.3	28.6	28.6	25.0	3.6	3.25 (1.11)
d. develop science - consciousness in enriching man's life?	25.0	25.0	42.9	7.1	0.0	3.68 (0.95)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what degree do you feel that the General Science Curriculum for grades 2 and 3 encourages the development of the following skills: (cont'd)						
e. appreciate the role of scientists in general and Muslim scientists in particular in the progress of human society?	25.9	51.9	11.1	11.1	0.0	3.93 (0.92)
14. To what degree do you feel that the Science Curriculum for Grades 2 and 3 is appropriate for the intellectual maturity standard of students concerning the following:						
a. amount of scientific knowledge?	24.0	44.0	28.0	4.0	0.0	3.88 (0.83)
b. degree of difficulty in treating it?	11.5	38.5	38.5	7.7	3.8	3.46 (0.95)
c. degree of specialization of scientific knowledge as independent topics: biology, chemistry, physics, geology, and astronomy?	14.3	25.0	53.6	7.1	0.0	3.46 (0.84)
d. time allocated to science education in each grade of this level?	21.4	21.4	35.7	17.9	3.6	3.39 (1.13)
e. standard of handling & manipulation of apparatus and equipment necessary for studying these subject matters?	14.3	14.3	53.6	14.3	3.6	3.21 (1.00)
f. degree of cognitive skills necessary to understand and comprehend scientific knowledge inculcated in the curriculum?	17.9	25.0	46.4	10.7	0.0	3.50 (0.92)
15. To what degree do you feel the following concepts for Grades 2 and 3 are appropriate for the cognitive level of students and class:						
First - Grade 2 Literary						
Unit 1: Science and Scientists						
1. science structure						
a. scientific material (knowledge structure of science)?	13.0	56.5	26.1	4.3	0.0	3.78 (0.74)
b. methodology of scientific thinking?	16.7	45.8	29.2	8.3	0.0	3.71 (0.86)
2. characteristics of science?	20.8	45.8	29.2	4.2	0.0	3.83 (0.82)
3. scientific processes?	12.5	45.8	37.5	4.2	0.0	3.67 (0.76)
4. employment of scientific thinking in solution of everyday problems?	17.4	60.9	13.0	8.7	0.0	3.87 (0.82)
Unit 2: Evolution of Astronomy						
1. astronomy in ancient times?	13.6	63.6	22.7	0.0	0.0	3.91 (0.61)
2. origin of the universe?	23.8	52.4	23.8	0.0	0.0	4.00 (0.71)
3. stars and their properties?	27.3	40.9	31.8	0.0	0.0	3.96 (0.79)
4. stars grouping?	36.4	31.8	27.3	4.5	0.0	4.00 (0.93)
5. scientists' views about stars?	36.4	36.4	27.3	0.0	0.0	4.09 (0.81)
6. solar system?	33.3	50.0	16.7	0.0	0.0	4.17 (0.70)
7. some astronomical phenomena in space?	33.3	37.5	29.2	0.0	0.0	4.04 (0.81)
8. finding directions by stars and compass?	33.3	33.3	33.3	0.0	0.0	4.00 (0.83)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Unit 3: Transportation						
1. means of land transportation?	33.3	37.5	16.7	8.3	4.2	3.88 (1.12)
2. means of sea transportation?	25.0	50.0	20.8	4.2	0.0	3.96 (0.81)
3. means of air transportation	25.0	50.0	16.7	8.3	0.0	3.92 (0.88)
Unit 4: Communication						
cables, telephones, radios, televisions, radar, and satellites?						
Unit 5: Science and Human Health						
1. effect of disease in the individual and society?	25.0	58.3	16.7	0.0	0.0	4.08 (0.65)
2. immunity and disease prevention?	37.5	45.8	12.5	4.2	0.0	4.17 (0.82)
3. effect of science in discovering and treating contagious diseases?	30.4	47.8	21.7	0.0	0.0	4.09 (0.73)
4. diseases resulting from the malfunction of one of body organs?	25.0	41.7	33.3	0.0	0.0	3.92 (0.78)
5. contagious diseases?	37.5	45.8	16.7	0.0	0.0	4.21 (0.72)
Unit 6: Science and the world food problem						
1. importance of nutrition to man's body?	41.7	41.7	12.5	4.2	0.0	4.21 (0.83)
2. world-food problems?	41.7	41.7	8.3	4.2	4.2	4.13 (1.04)
3. causes of food problems	41.7	29.2	25.0	4.2	0.0	4.08 (0.93)
4. The role of technology in the solution of food problem?						
a. horizontal expansion in agriculture?	37.5	29.2	29.2	4.2	0.0	4.00 (0.93)
b. vertical expansion in agriculture?	37.5	25.0	29.2	8.3	0.0	3.92 (1.02)
c. increasing animal proteins?	30.4	47.8	13.0	8.7	0.0	4.00 (0.91)
d. manufacturing and preserving agricultural products?	33.3	37.5	20.8	4.2	4.2	3.92 (1.06)
e. artificial meat?	29.2	37.5	29.2	4.2	0.0	3.92 (0.88)
Second - Grade 3 Arts Section						
Unit 1: Oil						
1. discovery of oil and its uses?	38.5	50.0	11.5	0.0	0.0	4.27 (0.67)
2. theories of oil formation?	34.6	46.2	15.4	0.0	3.8	4.08 (0.94)
3. oil explorations?	26.9	53.8	15.4	3.8	0.0	4.04 (0.77)
4. oil work problems?	30.8	57.7	7.7	3.8	0.0	4.15 (0.73)
5. means of oil transport?	46.2	42.3	7.7	3.8	0.0	4.31 (0.79)
6. oil refineries?	23.1	65.4	7.7	3.8	0.0	4.08 (0.69)
7. present importance of oil?	42.3	34.6	19.2	3.8	0.0	4.15 (0.88)
8. oil dependent industries?	32.0	48.0	16.0	4.0	0.0	4.08 (0.81)
Unit 2: Solar Energy						
1. solar radiations reaching the earth?	32.0	40.0	24.0	4.0	0.0	4.00 (0.87)
2. indirect solar energy?	44.0	40.0	12.0	4.0	0.0	4.24 (0.83)
3. direct solar energy?	40.0	32.0	20.0	8.0	0.0	4.04 (0.98)
4. thermal applications of solar radiations?	26.9	42.3	19.2	11.5	0.0	3.85 (0.97)
5. electricity from solar radiations?	28.0	40.0	20.0	12.0	0.0	3.84 (0.99)
6. futuristic look of producing electricity from solar energy?	15.4	46.2	30.8	3.8	3.8	3.65 (0.94)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Unit 3: Nuclear Energy						
1. nuclear structure?	26.1	43.5	21.7	8.7	0.0	3.87 (0.92)
2. peaceful utilization of radioactive isotopes?	33.3	25.0	29.2	12.5	0.0	3.79 (1.06)
3. nuclear fission?	17.4	47.8	8.7	21.7	4.3	3.52 (1.16)
4. nuclear fusion?	20.0	44.0	16.0	16.0	4.0	3.60 (1.12)
Unit 4: Environment and Pollution						
1. Man and Environment:						
a. carbon-cycle in nature?	34.8	30.4	21.7	13.0	0.0	3.87 (1.06)
b. nitrogen-cycle in nature?	20.8	45.8	29.2	4.2	0.0	3.83 (0.82)
c. water-cycle in nature?	36.0	36.0	24.0	4.0	0.0	4.04 (0.89)
d. integration of environmental components?	26.9	46.2	19.2	7.7	0.0	3.92 (0.89)
2. contemporary technology and its effects on environment:						
a. sea pollution?	23.1	61.5	15.4	0.0	0.0	4.08 (0.63)
b. bacterial and chemical pollution?	23.1	46.2	23.1	7.7	0.0	3.85 (0.88)
c. pollution by hard and radioactive substances?	23.1	42.3	30.8	3.8	0.0	3.85 (0.83)
d. kinds of harmful radiations?	33.3	42.9	19.0	4.8	0.0	4.05 (0.87)
e. air pollution?	38.5	38.5	19.2	3.8	0.0	4.12 (0.86)
f. hazards of radioactive pollution to man?	30.8	46.2	7.7	15.4	0.0	3.92 (1.02)
g. soil pollution?	37.5	37.5	12.5	12.5	0.0	4.00 (1.02)
h. noise pollution?	32.0	48.0	8.0	12.0	0.0	4.00 (0.96)
Unit 5: Meteorology and Climate Forecast						
1. meteorology and climate forecast?	26.9	53.8	15.4	3.8	0.0	4.04 (0.77)
2. aerosphere?	30.8	42.3	19.2	7.7	0.0	3.96 (0.92)
3. meteorologic parameters and their measurements?	30.8	34.6	30.8	3.8	0.0	3.92 (0.89)
4. air masses and air fronts?	34.6	23.1	26.9	15.4	0.0	3.77 (1.11)
5. cyclons & anticyclons?	26.9	38.5	23.1	11.5	0.0	3.81 (0.98)
6. importance of meteorology and climate forecast?	40.0	40.0	12.0	8.0	0.0	4.12 (0.93)

16. Some new concepts introduced into the secondary curriculum may have raised some disagreements about their appropriateness for grades at this level. Please give your opinion concerning the following curricular topics using the following measurement:

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1 = appropriate and the concept stays in place? 2 = easy and to be moved to a lower grade? 3 = difficult and to be moved to a higher grade? 4 = higher than the secondary standard and to be moved to university level? 5 = to be deleted?						
Grade 2:						
a. stars - characteristics and groups?	42.1	21.1	31.6	0.0	5.3	3.95 (1.13)
b. solar system?	47.4	36.8	15.8	0.0	0.0	4.32 (0.75)
c. internal combustion engine?	31.6	15.8	52.6	0.0	0.0	3.79 (0.92)
d. diesel engine?	26.3	15.8	57.9	0.0	0.0	3.68 (0.89)
e. radio?	20.0	25.0	45.0	10.0	0.0	3.55 (0.95)
f. cathode-ray tube and television?	25.0	15.0	40.0	10.0	10.0	3.35 (1.27)
Unit 3:						
a. nuclear energy (nuclear fission and nuclear fusion)?	36.0	28.0	32.0	0.0	4.0	3.92 (1.04)
b. content of earth atmosphere?	44.0	24.0	20.0	8.0	4.0	3.96 (1.17)
c. atmospheric humidity and its measurement?	36.0	24.0	20.0	8.0	12.0	3.64 (1.38)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Part II Section A: Part 2
Curriculum Content: History
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani History Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the History Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	29.7	53.1	14.1	3.1	0.0	4.09 (0.75)
2. To what extent do the curricula of History, Human Culture, and Civic Education realize the following:						
a. needs of student after graduation?	21.1	35.1	29.8	5.3	8.8	3.54 (1.15)
b. long-range educational objectives?	21.4	37.5	28.6	8.9	3.6	3.64 (1.03)
c. integration with the topics of both the intermediate and secondary levels?	28.6	37.5	19.6	7.1	7.1	3.73 (1.17)
d. coherence among topics and logical sequence?	24.6	40.4	21.1	12.3	1.8	3.74 (1.03)
e. emphasis on contemporary issues and current events?	29.3	27.6	25.9	10.3	6.9	3.62 (1.21)
f. horizontal (parallel) integration among subjects - History, Civic Education and Human Culture?	27.3	34.5	21.8	5.5	10.9	3.62 (1.25)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	26.7	36.7	26.7	10.0	0.0	3.80 (0.95)
b. utilizing the environment as a source of learning?	21.3	24.6	41.0	8.2	4.9	3.49 (1.07)
c. library reference work and field research?	16.4	14.8	27.9	26.2	14.8	2.92 (1.30)
d. training in collection of information through scientific methods?	16.4	29.5	18.0	29.5	6.6	3.20 (1.22)
e. using media as educational material?	31.6	17.5	36.8	10.5	3.5	3.63 (1.14)
4. To what extent does coherence exist between the three curricula (History, Civic Education, and Human Culture) and each of the following:						
a. Geography?	32.3	22.6	32.3	6.5	6.5	3.68 (1.18)
b. Contemporary Problems?	19.6	33.9	25.0	14.3	7.1	3.45 (1.17)
c. Islamic Education?	26.4	34.0	32.1	7.5	0.0	3.79 (0.93)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. History?	42.9	22.4	12.2	12.2	10.2	3.76 (1.39)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient: (cont'd)						
b. Civic Education?	55.4	25.0	12.5	0.0	7.1	4.21 (1.14)
c. Human Culture?	24.5	26.4	17.0	18.9	13.2	3.30 (1.38)
6. To what extent do the three curricula (Civic Education, Human Culture, and History) foster the following educational attitudes:						
a. direct reference to the original texts?	20.7	34.5	37.9	6.9	0.0	3.69 (0.88)
b. encouragement of independent critical thinking?	17.9	37.5	35.7	7.1	1.8	3.63 (0.93)
c. satisfaction of applying knowledge to daily situations?	23.2	28.6	32.1	12.5	3.6	3.55 (1.09)
d. application of scientific and historic method in research and thinking?	22.8	36.8	26.3	10.5	3.5	3.65 (1.06)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to achieve objectives?	12.1	41.4	27.6	13.8	5.2	3.41 (1.04)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	20.7	37.9	25.9	13.8	1.7	3.62 (1.02)
9. To what extent did learner's activities help develop the following attitudes:						
a. sound thinking?	25.8	41.9	22.6	8.1	1.6	3.82 (0.97)
b. interpretation?	21.7	36.7	30.0	8.3	3.3	3.65 (1.02)
c. rationalization?	13.3	50.0	23.3	10.0	3.3	3.60 (0.96)
d. analysis?	16.7	40.0	35.0	5.0	3.3	3.62 (0.94)
e. synthesizing?	13.8	29.3	43.1	8.6	5.2	3.38 (1.01)
f. forming opinions?	16.7	38.3	35.0	8.3	1.7	3.60 (0.92)
10. To what extent did the History Curriculum for Grade 1 help the student perceive time and place relationsips and use them as a fundamental core in studying the history of modern Europe?	38.1	42.9	15.9	1.6	1.6	4.14 (0.86)
11. To what extent does the curriculum give students the opportunity to be aware of the historical events of modern and contemporary world and various existing political, economic, social, and cultural problems?	32.3	46.8	16.1	4.8	0.0	4.07 (0.83)
12. To what extent does integration and coherence exist among Grade 1 History topics from European Renaissance to World War II?	47.6	36.5	12.7	1.6	1.6	4.27 (0.87)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent do the textbook topics contribute to covering all aspects of Modern European History?	27.0	41.3	15.9	12.7	3.2	3.76 (1.09)
14. To what extent is the Arabic culture's influence on Europe's Renaissance in the 15th and 16th centuries and later developments illustrated in the textbooks?	28.6	33.3	28.6	7.9	1.6	3.79 (1.00)
15. To what extent do curriculum topics illustrate positive influences of European Culture on the Arab World?	16.1	43.5	24.2	11.3	4.8	3.55 (1.05)
16. To what extent does the curriculum allow students to realize the following:						
a. appreciate artistic, literary, and scientific accomplishments of the European Renaissance?	27.4	37.1	25.8	9.7	0.0	3.82 (0.95)
b. take pride in the courageous spirit of resisting European colonialism exhibited by Arabs and muslims in general and Omani in particular?	30.6	32.3	19.4	11.3	6.5	3.69 (1.21)
17. To what extent were figures, maps, and drawings exhibited in the textbook sufficient to understanding curriculum topics?	25.4	36.5	17.5	14.3	6.3	3.60 (1.20)
18. To what extent did historical texts in the textbook contribute to generating enthusiasm and stimulating students to study this period, and making the material relevant?	28.6	34.9	27.0	7.9	1.6	3.81 (1.00)
History: Grade 2 Secondary (Art Section)						
19. To what extent are topics of the History Curriculum for Grade 2 secondary (arts section) in accordance with the following:						
a. appointed curriculum plan?	33.9	42.4	16.9	5.1	1.7	4.02 (0.94)
b. desired objectives of the curriculum?	35.6	50.8	10.2	3.4	0.0	4.19 (0.75)
20. To what extent do curriculum topics contribute to modifying the following aspects of student behavior:						
a. deepening of faith in Islam?	58.6	31.0	8.6	1.7	0.0	4.47 (0.73)
b. taking pride in human and Arabic values?	57.6	28.8	10.2	1.7	1.7	4.39 (0.87)
c. cooperation?	42.4	37.3	15.3	5.1	0.0	4.17 (0.87)
d. loyalty to Arab and Islamic nation?	60.3	24.1	10.3	3.4	1.7	4.38 (0.93)
e. loyalty to Oman?	49.2	30.5	15.3	3.4	1.7	4.22 (0.95)
21. To what extent was the curriculum successful in treating the following aspects of Islamic Culture: development, origin, illustrations, and characteristics?	50.0	36.2	8.6	5.2	0.0	4.31 (0.84)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
22. To what extent does the curriculum allow the treatment of the following topics:						
a. influence of Islamic Culture in European Culture?	55.9	30.5	8.5	5.1	0.0	4.37 (0.85)
b. fighting the Mongol and Crusade dangers?	52.5	32.2	8.5	3.4	3.4	4.27 (1.00)
c. spread of Islam in Central and Southern Asia?	50.0	40.0	6.7	0.0	3.3	4.33 (0.88)
23. To what extent is coherence realized between curricula content of this secondary class and that of Preparatory Grade 2 and Primary Grade 5?	29.8	33.3	26.3	5.3	5.3	3.77 (1.10)
24. To what extent does the curriculum illustrate fundamental historical origins of Arab and Islamic Unity?	33.3	43.3	20.0	3.3	0.0	4.07 (0.82)
25. To what extent does the curriculum stimulate students' motivation to read and reference the original sources of the history of the Arab and Islamic Nation?	28.3	35.0	18.3	15.0	3.3	3.70 (1.14)
26. To what extent do original texts included in topics of curriculum content contribute to practical application and providing proofs that help understanding and interpretation?	26.7	40.0	18.3	10.0	5.0	3.73 (1.12)
27. To what extent do figures and maps included contribute to understanding and illustrating curriculum topics?	24.1	39.7	19.0	8.6	8.6	3.62 (1.20)
History: Grade 3 Secondary (Arts Section)						
28. To what extent was the History Curriculum for Grade 3 Secondary (Arts Section) successful in covering the following topics:						
a. history of the Arab Gulf before Islam and Islamic Eras?	44.8	27.6	19.0	5.2	3.4	4.05 (1.08)
b. history of the Arab Gulf in modern times?	34.5	41.4	15.5	3.4	5.2	3.97 (1.06)
c. navigation and sea-life in Islamic Eras?	36.2	44.8	13.8	1.7	3.4	4.09 (0.94)
d. history of Abadiyah?	51.7	29.3	10.3	3.4	5.2	4.19 (1.10)
29. To what extent was the curriculum successful in achieving the general objectives of studying the topic - the History of Oman and the Arab Gulf?	34.4	44.3	11.5	8.2	1.6	4.02 (0.98)
30. To what extent does the curriculum encourage stimulation of student's motivation to read and reference original sources for studying History of Oman and the Arab Gulf?	19.7	37.7	14.8	16.4	11.5	3.38 (1.29)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
31. To what extent is coherence and continuity achieved between the History Curricula of Grade 3 secondary and those of Grades 1 and 2 secondary?	8.2	26.2	21.3	26.2	18.0	2.80 (1.25)
32. As a secondary level History teacher, are you convinced that in order to enrich the content of Grade 3 History (Arts Section) that the following topics related to the history of Oman and the Arab Gulf be included in the curriculum:						
a. navigation and marine life?	46.2	33.3	2.6	7.7	10.3	3.97 (1.33)
b. marine natural phenomena in Islam literature?	37.3	16.9	15.3	10.2	20.3	3.41 (1.57)
c. observation and measurement instruments?	43.3	16.7	16.7	11.7	11.7	3.68 (1.43)
d. natural and marine phenomena, such as tide and ebb and marine currents?	37.3	23.7	18.6	8.5	11.9	3.66 (1.37)
e. particular phenomena of vegetation (herbs) in deserts and the winds?	37.9	24.1	15.5	5.2	17.2	3.60 (1.47)
33. To what extent were the curriculum and its contributions successful in modifying student behavior toward:						
a. loyalty to the Sultanate?	41.0	27.9	21.3	4.9	4.9	3.95 (1.13)
b. loyalty to Gulf society and Arab nation?	42.6	41.0	11.5	4.9	0.0	4.21 (0.84)
c. understanding history and inferences of historical events based on present methods of availability of data and documentation?	35.0	31.7	21.7	11.7	0.0	3.90 (1.02)
d. re-birth of the glory of the past?	44.3	27.9	16.4	8.2	3.3	4.02 (1.12)
e. perceiving historic development of the Sultanate of Oman and the Arab Gulf?	49.2	31.1	9.8	6.6	3.3	4.16 (1.07)
34. To what extent does the curriculum encourage the student to explore and understand the interaction of man with the Omani and Gulf environment?	34.4	36.1	24.6	4.9	0.0	4.00 (0.89)
35. To what extent are instructional materials related to the curriculum sufficient to clarify concepts and perceptions of time and place dimensions in order to comprehend the history of this region?	11.5	47.5	18.0	19.7	3.3	3.44 (1.04)
36. To what extent do examples of activities mentioned at the end of every lesson contribute to helping students discover and comprehend facts and concepts?	18.0	54.1	9.8	14.8	3.3	3.69 (1.04)
37. To what extent was the curriculum successful in training students in the following:						
a. chairing open discussion?	21.3	37.7	24.6	13.1	3.3	3.61 (1.07)
b. conducting research?	14.8	39.3	14.8	19.7	11.5	3.26 (1.26)
c. writing reports?	16.4	36.1	16.4	16.4	14.8	3.23 (1.32)
d. using the school textbook as an important learning source?	45.9	37.7	14.8	0.0	1.6	4.26 (0.84)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Geography & Contemporary Problems
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani Geography and Contemporary Problems Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Geography and Contemporary Problems Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	31.9	50.0	18.1	0.0	0.0	4.14 (0.70)
2. To what extent do the curricula of Geography, Civic Education and Human Culture curricula realize the following:						
a. needs of students of student after graduation?	19.4	34.7	29.2	8.3	8.3	3.49 (1.15)
b. long-range educational objectives?	23.9	47.9	16.9	5.6	5.6	3.79 (1.05)
c. integration with the topics of both the preparatory and secondary levels?	27.8	45.8	18.1	2.8	5.6	3.88 (1.03)
d. coherence among topics and logical sequence?	22.9	35.7	22.9	10.0	8.6	3.54 (1.20)
e. emphasis on contemporary issues and current events?	35.2	19.7	26.8	11.3	7.0	3.65 (1.27)
f. horizontal (parallel) integration among subjects - Geography, Civic Education, and Human Culture?	25.0	36.1	31.9	1.4	5.6	3.74 (1.04)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	29.2	36.1	27.8	5.6	1.4	3.86 (0.95)
b. utilizing the environment as a source of learning?	30.6	34.7	25.0	9.7	0.0	3.86 (0.97)
c. library reference work and field research?	23.6	19.4	25.0	22.2	9.7	3.25 (1.31)
d. training in collection of information through scientific methods?	15.3	30.6	23.6	20.8	9.7	3.21 (1.22)
e. using media as educational material?	38.4	31.5	24.7	4.1	1.4	4.01 (0.97)
4. To what extent does coherence exist between the three curricula (Geography, Civic Education, and Human Culture) and each of the following:						
a. History?	27.5	33.3	24.6	7.2	7.2	3.67 (1.17)
b. Contemporary Problems?	24.6	44.9	21.7	1.4	7.2	3.78 (1.07)
c. Islamic Education?	29.9	28.4	19.4	16.4	6.0	3.60 (1.24)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. Geography?	26.0	24.7	20.5	16.4	12.3	3.36 (1.36)
b. Civic Education?	51.5	33.3	13.6	1.5	0.0	4.35 (0.77)
c. Human Culture?	25.4	22.0	22.0	13.6	16.9	3.25 (1.42)
6. To what extent do the three curricula (Geography, Civic Education and Human Culture) foster the following educational attitudes:						
a. direct reference to the original texts?	19.4	41.8	20.9	10.4	7.5	3.55 (1.15)
b. encouragement of independent critical thinking?	22.5	38.0	26.8	5.6	7.0	3.63 (1.11)
c. satisfaction of applying knowledge to daily life situations?	27.4	31.5	27.4	13.7	0.0	3.73 (1.02)
d. application of scientific and historic method in research and thinking?	34.7	30.6	20.8	6.9	6.9	3.79 (1.20)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to achieve objectives?	22.2	29.2	34.7	9.7	4.2	3.56 (1.07)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	22.2	34.7	31.9	8.3	2.8	3.65 (1.01)
9. To what extent did learner's activities help to develop the following attitudes:						
a. sound thinking?	28.8	38.4	26.0	5.5	1.4	3.88 (0.94)
b. interpretation?	22.5	43.7	23.9	7.0	2.8	3.76 (0.98)
c. rationalization?	23.6	37.5	26.4	11.1	1.4	3.71 (1.00)
d. analysis?	19.4	33.3	27.8	13.9	5.6	3.47 (1.13)
e. synthesizing?	15.5	29.6	33.8	14.1	7.0	3.32 (1.12)
f. forming opinions?	11.3	33.8	29.6	15.5	9.9	3.21 (1.15)
10. To what extent was the Geography Curriculum at the Secondary Level committed to the principle of non-repetition?	22.2	37.5	18.1	18.1	4.2	3.56 (1.15)
11. To what extent does the Geography Curriculum at the Secondary Level contribute to the utilization of logical thinking, in addition to organized content of information?	15.3	54.2	20.8	4.2	5.6	3.69 (0.97)
12. To what extent did the Geography Curriculum depend on experimental and field studies?	22.2	29.2	20.8	18.1	9.7	3.36 (1.28)
13. To what extent did the curriculum avoid topics beyond the intellect and perception of students?	26.0	28.8	23.3	15.1	6.8	3.52 (1.23)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
14. To what extent was the curriculum successful in preparing the student to continue his studies at a higher level?	30.1	39.7	19.2	8.2	2.7	3.86 (1.03)
15. To what extent was integration among Geography and Contemporary Problems Curricula in Grades I, II, and III in the Arts Section realized?	25.7	31.4	24.3	7.1	11.4	3.53 (1.27)
16. To what extent were teachers successful in using different instructional materials to achieve the objectives of the Geography Curriculum at the Secondary Level?	37.0	35.6	23.3	2.7	1.4	4.04 (0.92)
17. To what extent did the curriculum help students develop attitudes and basic skills for critical thinking in the following:						
a. postponing judgement?	9.7	45.8	31.9	6.9	5.6	3.47 (0.96)
b. utilizing several information sources?	25.0	30.6	33.3	4.2	6.9	3.63 (1.12)
c. perceiving concepts, research methods, and scientific thinking?	26.0	28.8	31.5	8.2	5.5	3.62 (1.13)
18. To what extent did the contents of the Geography Curriculum contribute to students' acquisition of the following cognitive and psychomotor skills:						
a. ability to read and understand geographical maps?	37.5	38.9	13.9	1.4	8.3	3.96 (1.16)
b. ability to draw maps and mark appropriate geographic symbols?	39.7	30.1	9.6	13.7	6.8	3.82 (1.28)
c. understanding statistical data?	34.7	29.2	22.2	9.7	4.2	3.81 (1.15)
d. understanding graphs?	27.8	27.8	29.2	12.5	2.8	3.65 (1.10)
e. use of statistical data?	29.2	31.9	25.0	11.1	2.8	3.74 (1.09)
f. graphic representation?	22.5	31.0	26.8	16.9	2.8	3.54 (1.11)
g. satisfactorily locating positions on maps?	36.6	29.6	28.2	4.2	1.4	3.96 (0.98)
h. satisfactorily interpreting locations?	26.4	37.5	26.4	6.9	2.8	3.78 (1.01)
i. applying all functions and attitudes related to previous items?	22.5	33.8	32.4	8.5	2.8	3.65 (1.02)
19. To what extent was the Geography Curriculum successful in the following:						
a. enlarging the conceptual scope from one class to the next through application of a concept to a wider area of examples?	32.9	49.3	15.1	2.7	0.0	4.12 (0.76)
b. intensifyinng the students' comprehension of concepts gradually to meet the grade level requirements?	28.8	41.1	26.0	4.1	0.0	3.95 (0.85)
20. To what extent was the Grade I Curriculum successful in students' acquisition of concepts that will help them understand the content of the curriculum of Grades 2 and 3 in the Arts Section?	29.0	31.9	26.1	8.7	4.3	3.73 (1.11)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
21. To what extent was the content of Grade I Curriculum successful in its treatment of elements of hydraulic system unknown by students at the preparatory level?	38.0	35.2	21.1	4.2	1.4	4.04 (0.95)
22. To what extent does the First Grade Secondary Level curriculum adequately cover the major elements of earth system?	33.8	39.4	22.5	4.2	0.0	4.03 (0.86)
23. To what extent was the curriculum successful in illustrating the concept of living systems? And in conceptualizing such a system?	26.8	35.2	26.8	9.9	1.4	3.76 (1.01)
24. To what extent was the curriculum successful in providing sufficient activities and exercises?	18.1	37.5	31.9	9.7	2.8	3.58 (0.99)
25. To what degree do you perceive the plan is adaptable to the curriculum content of Grade I?	15.9	27.5	33.3	20.3	2.9	3.33 (1.07)
Geography: Grade II Arts Section						
26. New units of sub-geography subject-matter such as applied geography, construction, industrialization citizenship and urbanization were included in the curriculum. To what degree do you perceive that these additions had the following characteristics:						
a. interesting and motivating for student's ability to understand them?	21.0	30.6	29.0	14.5	4.8	3.48 (1.13)
b. new in content in comparison to previous Geography topics studied by the student?	37.9	32.8	19.0	10.3	0.0	3.98 (1.00)
27. To what extent was the curriculum successful in:						
a. explaining the meaning of "Applied Geography" and its application?	47.5	36.1	11.5	3.3	1.6	4.25 (0.91)
b. helping the students to understand the difference among different human habitats, illustrating latitude and position, with concerned applications to the Sultanate?	27.9	41.0	21.3	8.2	1.6	3.85 (0.98)
c. familiarizing students with the concept of national settlement and its rationale?	41.0	37.7	19.7	1.6	0.0	4.18 (0.81)
28. To what extent was the curriculum successful in illustrating types of transportation, and their roles in development and enhancement of trade exchange internally and externally?	46.8	37.1	12.9	3.2	0.0	4.27 (0.81)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
29. To what extent was the curriculum successful in illustrating concepts relating to oil and in educating students to all issues relative to economic, social, and political effects?	48.4	40.3	6.5	4.8	0.0	4.32 (0.81)
30. A number of individual and group projects were included in the Grade 2 Curriculum. To what degree were the following characteristics realized:						
a. even distribution?	12.9	45.2	24.2	12.9	4.8	3.48 (1.04)
b. contribution to curriculum content enrichment and development?	15.0	45.0	15.0	18.3	6.7	3.43 (1.16)
31. A great number of activities and exercises were included in the curriculum; to what extent did these:						
a. contribute to clarifying and enriching the content?	16.1	50.0	16.1	12.9	4.8	3.60 (1.06)
b. motivating students to analyze, synthesize and comprehend through these activities?	31.7	43.3	16.7	6.7	1.7	3.97 (0.96)
32. To what extent did the plan coincide with the curriculum content for Grade 2 in the Arts Section?	37.7	27.9	21.3	9.8	3.3	3.87 (1.13)
Geography: Grade 3 Arts Section						
33. The curriculum started with a Unit in Geographic Thought, called: "Region Construction". To what extent did it contribute toward:						
a. illustrating regional construction mentioned in other geography curriculum units?	25.4	37.3	22.0	8.5	6.8	3.66 (1.15)
b. simplifying regional thought in order to be understood intellectually?	26.7	30.0	26.7	10.0	6.7	3.60 (1.18)
c. explaining the geographer's reasons for employing regional systems?	35.6	39.0	11.9	10.2	3.4	3.93 (1.10)
34. The content of the curriculum dealt with regions situated between the Equator and Middle Zones To what degree do you see that such limiting is useful to a student's particular understaning of his local environment?	31.7	41.7	10.0	10.0	6.7	3.82 (1.19)
35. To what extent was the curriculum successful in:						
a. identifying and interpreting the position of the Sultanate?	63.3	20.0	15.0	1.7	0.0	4.45 (0.81)
b. describing, analyzing, and rationalizing the natural topography of the Sultanate?	57.6	30.5	8.5	1.7	1.7	4.41 (0.85)
c. division of the Sultanate into its geographical regions?	47.5	37.3	11.9	3.4	0.0	4.29 (0.81)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
35. To what extent was the curriculum successful in: (cont'd)						
d. familiarizing students with agricultural products and facilities in the Sultanate?	52.5	37.3	8.5	1.7	0.0	4.41 (0.72)
e. knowing the establishment and development of industry in the Sultanate?	45.8	40.7	10.2	3.4	0.0	4.29 (0.79)
f. explaining the State's specific philosophy of service to citizens throughout the Sultanate?	54.2	30.5	8.5	5.1	1.7	4.31 (0.95)
36. To what extent did the content contribute to illustrating the following:						
a. general features of the Arabian Gulf region?	54.1	29.5	6.6	6.6	3.3	4.25 (1.06)
b. interpretation of the weather conditions in the Arabian Gulf region?	62.3	23.0	9.8	4.9	0.0	4.43 (0.87)
c. explanation of water resources and forming positive attitudes to dealing with them in the Arabian Gulf region?	45.0	38.3	8.3	6.7	1.7	4.18 (0.97)
d. specification of population characteristics of the Arabian Gulf and past and present transformations of Gulf States?	53.3	30.0	10.0	6.7	0.0	4.30 (0.91)
e. economic concepts that encompassed the Arabian Gulf region?	46.7	35.0	13.3	5.0	0.0	4.23 (0.87)
37. To what extent were activities and exercises adequate?	26.7	43.3	20.0	8.3	1.7	3.85 (0.97)
Contemporary Problems for Grades 2 and 3 Literary						
38. A number of universal contemporary problems were included in the curriculum structure with the understanding that the solution of these problems should be derived from the reality of the Sultanate, the Gulf region and the Arab World, to what degree do you see that the follow-up of current events were:						
a. interesting and exciting from the students point of view to follow-up?	48.1	35.2	9.3	5.6	1.9	4.22 (0.97)
b. useful in students' acquisition of the ability to distinguish the valuable from the non-valuable flood of information in the mass media?	34.6	53.8	5.8	5.8	0.0	4.17 (0.79)
c. helpful for students to perceive time and place relationships?	43.4	22.6	22.6	9.4	1.9	3.96 (1.11)
d. enlightening students to the extent of interaction between the Omani environment and other environments?	32.1	41.5	20.8	5.7	0.0	4.00 (0.88)
39. A number of contemporary problems were included in the curricula for Grade 2 and 3 Science Section. To what extent does the curriculum content:						
a. illustrate these problems?	41.5	47.2	9.4	1.9	0.0	4.28 (0.72)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
39. A number of contemporary problems were included in the curricula for Grade 2 and 3 Science Section. To what extent does the curriculum content: (cont'd)						
b. show the negative aspects of these problems?	31.5	50.0	13.0	3.7	1.9	4.06 (0.88)
c. motivate students to adopt positive opinions and ideas toward them?	32.1	41.5	17.0	7.5	1.9	3.94 (0.99)
40. To what degree does the curriculum connect those scientifically and experimentally-based problems with other relative sciences so that there is a comprehensive scope to those problems?	19.6	39.2	25.5	11.8	3.9	3.59 (1.06)
41. To what degree do you see this plan sufficient?	37.7	30.2	15.1	15.1	1.9	3.87 (1.14)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Civic Education
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani Civic Education Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Civic Education Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	34.2	47.4	15.8	2.6	0.0	4.13 (0.78)
2. To what extent do the curricula of Civic Education, Human Culture, and History realize the following:						
a. needs of student after graduation?	25.6	38.5	10.3	17.9	7.7	3.56 (1.27)
b. long-range educational objectives?	25.6	46.2	15.4	10.3	2.6	3.82 (1.02)
c. integration with the topics of both the preparatory and secondary levels?	25.0	41.7	25.0	2.8	5.6	3.78 (1.05)
d. coherence among topics and logical sequence?	31.4	37.1	17.1	2.9	11.4	3.74 (1.27)
e. emphasis on contemporary issues and current events?	34.2	28.9	18.4	10.5	7.9	3.71 (1.27)
f. horizontal (parallel) integration among subjects - Civic Education, Human Culture, and History?	35.1	29.7	24.3	0.0	10.8	3.78 (1.25)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	27.5	37.5	20.0	12.5	2.5	3.75 (1.08)
b. utilizing the environment as a source of learning?	35.9	33.3	7.7	15.4	7.7	3.74 (1.31)
c. library reference work and field research?	15.8	26.3	15.8	23.7	18.4	2.97 (1.39)
d. training in collection of information through scientific methods?	16.2	27.0	32.4	16.2	8.1	3.27 (1.17)
e. using media as educational material?	22.5	35.0	22.5	12.5	7.5	3.53 (1.20)
4. To what extent does coherence exist between the three curricula (Civic Education, Human Culture, and History) and each of the following:						
a. Geography?	31.6	34.2	23.7	5.3	5.3	3.82 (1.11)
b. Contemporary Problems?	32.4	32.4	18.9	8.1	8.1	3.73 (1.24)
c. Islamic Education?	35.1	35.1	16.2	8.1	5.4	3.87 (1.16)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. Civic Education?	57.5	22.5	10.0	2.5	7.5	4.20 (1.20)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient: (cont'd)						
b. Human Culture?	27.8	16.7	13.9	13.9	27.8	3.03 (1.61)
c. History?	38.2	29.4	8.8	11.8	11.8	3.71 (1.40)
6. To what extent do the three curricula (Civic Education, Human Culture and History) foster the following educational attitudes:						
a. direct reference to the original texts?	30.8	35.9	12.8	10.3	10.3	3.67 (1.31)
b. encouragement of independent critical thinking?	30.0	35.0	15.0	15.0	5.0	3.70 (1.20)
c. satisfaction of applying knowledge to daily life situations?	30.0	30.0	22.5	12.5	5.0	3.68 (1.19)
d. application of scientific and historic method in research and thinking?	30.0	40.0	17.5	7.5	5.0	3.83 (1.11)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups coopewrating to achieve objectives?	20.5	28.2	35.9	12.8	2.6	3.51 (1.05)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	30.8	35.9	25.6	5.1	2.6	3.87 (1.01)
9. To what extent did learner's activities help develop the following attitudes:						
a. sound thinking?	30.0	45.0	15.0	10.0	0.0	3.95 (0.93)
b. interpretation?	27.5	35.0	25.0	10.0	2.5	3.75 (1.06)
c. rationalization?	27.5	30.0	35.0	5.0	2.5	3.75 (1.01)
d. analysis?	30.8	28.2	23.1	12.8	5.1	3.67 (1.20)
e. synthesizing?	23.1	33.3	28.2	10.3	5.1	3.59 (1.12)
f. forming opinions?	25.6	23.1	35.9	10.3	5.1	3.54 (1.14)
A - Grade 1 (Omani Society)						
10. To what extent was the Omani Curriculum successful in the following:						
a. presentation of general social concepts and methods of studying society as an introduction to the study of the Omani society?	47.5	45.0	5.0	2.5	0.0	4.38 (0.71)
b. relating these concepts to social circumstances in the Sultanate of Oman?	51.3	41.0	5.1	0.0	2.6	4.39 (0.82)
c. emphasizing the functions of the family, family development and treatment of family problems?	57.5	30.0	5.0	5.0	2.5	4.35 (0.98)
d. knowledge of habits, traditions and Omani values, and their particular characteristics?	64.1	28.2	7.7	0.0	0.0	4.56 (0.64)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent was the Omani Curriculum successful in the following: (cont'd)						
e. identifying Omani heritage such as castles, fortresses, towers, and the distinctive features of this heritage?	75.7	18.9	2.7	2.7	0.0	4.68 (0.67)
f. knowledge of the ancient and modern activities of Omani people?	62.2	35.1	2.7	0.0	0.0	4.60 (0.55)
11. To what extent was the curriculum successful in developing in students the following attitudes:						
a. acquisition of positive and practical viewpoints on social development?	38.5	46.2	10.3	2.6	2.6	4.15 (0.90)
b. identifying social organizations in Oman, the function of each, and the mutual relationships among them?	59.0	28.2	10.3	0.0	2.6	4.41 (0.88)
c. providing the student with Omani culture?	61.5	30.8	5.1	2.6	0.0	4.51 (0.72)
d. taking pride in the nation, identifying with it, and being loyal to it?	76.9	15.4	7.7	0.0	0.0	4.69 (0.61)
e. instilling characteristics of good citizenship?	69.2	23.1	5.1	2.6	0.0	4.59 (0.72)
f. recognizing the great achievements of the present era?	79.5	17.9	2.6	0.0	0.0	4.77 (0.49)
g. acquisition of the skill of reading numbers, drawing charts and figures?	41.0	35.9	15.4	7.7	0.0	4.10 (0.94)
12. To what extent did curriculum contribute to presenting an overall view of the following:						
a. development in the Sultanate of Oman?	66.7	25.6	7.7	0.0	0.0	4.59 (0.64)
b. role of oil sector?	48.7	38.5	10.3	2.6	0.0	4.33 (0.77)
c. role of economic organizations and banks in utilizing Omani economic life?	47.4	36.8	15.8	0.0	0.0	4.32 (0.74)
Grade 2 (Arab Society)						
13. To what extent was the Arab Society curriculum successful in realizing the following:						
a. illustrating the importance of the country's location and its effect on Arab Society?	57.6	36.4	3.0	3.0	0.0	4.49 (0.71)
b. identifying problems and challenges caused by location?	45.5	45.5	9.1	0.0	0.0	4.36 (0.65)
c. defining Arabic culture and identifying its characteristics and constancy?	60.6	21.2	15.2	3.0	0.0	4.39 (0.86)
d. formation of attitudes and values that can help student's acquisition of sound habits and various skills?	43.8	34.4	15.6	6.3	0.0	4.16 (0.92)
e. perceiving factors of Arab Unity and consistence?	48.5	24.2	24.2	3.0	0.0	4.18 (0.92)
f. benefit from Quranic Surahs and the Prophet Hadith which emphasize the interrelationship between the Arabic and Islamic Worlds?	45.5	39.4	12.1	3.0	0.0	4.27 (0.80)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent was the Arab Society curriculum successful in realizing the following: (cont'd)						
g. instilling pride and loyalty to Arab country and Arabic culture in students?	53.1	40.6	3.1	0.0	3.1	4.41 (0.84)
h. identifying demographic characteristics of people in the Arab country?	45.5	42.4	9.1	3.0	0.0	4.30 (0.77)
14. To what extent did the curriculum contribute to the realiation of the following:						
a. recognization of the efforts of Arab and international organizations in the realm of investigating the population status in the Arab World?	42.4	42.4	15.2	0.0	0.0	4.27 (0.72)
b. dependence on extra-curricular activities and cooperative and environmental projects as a method for research and thinking?	27.3	39.4	21.2	9.1	3.0	3.79 (1.05)
c. illustrating the special features and activities of the economic structure of Arab World?	36.4	42.4	15.2	6.1	0.0	4.09 (0.88)
d. identifying present and future directions of the national economy?	40.6	34.4	25.0	0.0	0.0	4.16 (0.81)
e. identifying present and future directions of family and social structure?	34.4	43.8	18.8	3.1	0.0	4.09 (0.82)
f. realizing educational and health services in the Arab World?	45.2	41.9	9.7	3.2	0.0	4.29 (0.78)
g. knowledge of the efforts of the Arab League in the scope of education?	51.5	27.3	21.2	0.0	0.0	4.30 (0.81)
h. knowledge of the efforts of the United Nations in the scope of education?	37.5	34.4	21.9	6.3	0.0	4.03 (0.93)
i. developing in students the skills of data and graph analysis and deduction of inferences?	27.3	42.4	21.2	6.1	3.0	3.85 (1.00)
15. To what extent do activities mentioned at the end of each chapter contribute to complementing the process of learning this curriculum concerning the study of society?	15.2	57.6	18.2	9.1	0.0	3.79 (0.82)
16. To what extent were diagrams and drawings mentioned in the textbook successful in supplementing and clarifying the ambiguous parts?	21.2	45.5	21.2	12.1	0.0	3.76 (0.94)
C. Grade 3 - Art Section						
Contemporary Islamic World						
17. To what extent does the curriculum Contemporary Islamic World contribute to the realization of the following:						
a. defining the concepts of culture and civilization and the relationship between Islam and civilization?	47.1	38.2	11.8	2.9	0.0	4.29 (0.80)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent does the curriculum Contemporary Islamic World contribute to the realization of the following: (cont'd)						
b. deducting particular features of Islamic Culture from consideration of mentioned information and definitions?	50.0	35.3	11.8	2.9	0.0	4.32 (0.81)
c. dependence on Quranic Texts and Prophet's Hadith when presenting the material and when emphasizing its information and concepts?	61.8	23.5	11.8	2.9	0.0	4.44 (0.82)
d. defining concepts related to basic elements of Islamic civilization?	50.0	32.4	14.7	2.9	0.0	4.29 (0.84)
e. developing positive attitudes towards Islamic systems?	42.4	48.5	3.0	6.1	0.0	4.27 (0.80)
f. illustrating common cultural features of the people that form the Islamic Nation?	47.1	23.5	23.5	2.9	2.9	4.09 (1.06)
g. presenting some famous cultural figures in Oman and the Islamic World?	51.5	30.3	3.0	12.1	3.0	4.15 (1.15)
h. presenting some non-Arab Muslim states?	41.2	35.3	11.8	8.8	2.9	4.03 (1.09)
i. defining the conditions of Islamic minorities in various countries of the World?	63.6	15.2	15.2	6.1	0.0	4.36 (0.96)
j. developing loyalty and identifying with the Islamic Nation?	55.9	23.5	14.7	5.9	0.0	4.29 (0.94)
18. To what extent does the curriculum contribute to the realization of the following:						
a. presenting the Organization of the Islamic conference, its objectives and the most important achievements of its efforts?	50.0	29.4	17.6	2.9	0.0	4.27 (0.86)
b. illustrating the importance of Jerusalem in the Islamic World?	50.0	29.4	17.6	2.9	0.0	4.27 (0.86)
c. illustrating the importance of the Islamic World in relation to its location, place, and cultural status?	55.9	26.5	14.7	2.9	0.0	4.35 (0.85)
d. future of Muslim and Islam in the Islamic World?	47.1	32.4	14.7	5.9	0.0	4.21 (0.91)
e. illustrating the Islamic ideology of the Universe, Man, and Life and its reflection of the Islamic philosophy of education?	55.9	23.5	17.6	2.9	0.0	4.32 (0.88)
19. To what extent do the activities included in the Civic Education Curriculum contribute to continuity and to integration as part of the total learning process?	38.2	29.4	14.7	14.7	2.9	3.85 (1.18)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Chemistry
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent does Omani curriculum achieve integration between Chemistry and other subject-matters:						
a. Chemistry and Physics?	24.5	37.7	30.2	7.5	0.0	3.79 (0.91)
b. Chemistry and Biology?	7.8	45.1	29.4	9.8	7.8	3.35 (1.04)
c. Chemistry and Mathematics?	6.0	44.0	30.0	14.0	6.0	3.30 (1.00)
2. Modern Chemistry curricula adopt "laboratory experiments" as a method of achieving the objectives of the subject. To what extent does the Omani curriculum provide adequate opportunities for the achievement of the following:						
a. students' participation in demonstration experiments?	19.2	44.2	23.1	7.7	5.8	3.64 (1.07)
b. students' participation in experimental activities which include:						
1. planning for the experiment?	5.8	25.0	32.7	19.2	17.3	2.83 (1.17)
2. preparation of equipment, materials, and preparation and installation of apparatus?	9.6	19.2	44.2	7.7	19.2	2.92 (1.20)
3. accurate observation of progress of experiments?	23.1	40.4	21.2	9.6	5.8	3.65 (1.12)
4. development of the habit of qualitative and quantitative recording of observations?	17.3	48.1	25.0	3.8	5.8	3.67 (1.00)
5. ability to construct and interpret curves?	9.8	37.3	41.2	7.8	3.9	3.41 (0.92)
6. result analysis and conclusions?	13.7	35.3	35.3	9.8	5.9	3.41 (1.04)
7. comprehensive report writing?	11.5	32.7	36.5	11.5	7.7	3.29 (1.07)
c. The curriculum inclusion of sufficient number of experiments to realize laboratory objectives?	13.7	41.2	23.5	13.7	7.8	3.39 (1.13)
d. emphasis of curriculum on the use of a special lab workbook?	15.4	28.8	23.1	11.5	21.2	3.06 (1.38)
e. curriculum emphasis on provision of necessary educational materials such as: apparatus, chemicals, etc.?	15.7	41.2	25.5	13.7	3.9	3.51 (1.05)
f. allocation of specific weekly hours for experimental laboratory work?	9.6	26.9	25.0	13.5	25.0	2.83 (1.34)
g. provision of sufficient weight for experimental activities when evaluating the students?	7.7	25.0	40.4	19.2	7.7	3.06 (1.04)
3. A list of objectives are included in the Secondary Chemistry Curriculum. To what degree do you feel that the curriculum content succeeded in achieving the following objectives:						
a. development of basic scientific concepts that help students understand and adapt to chemical phenomena in their environment?	7.7	55.8	26.9	9.6	0.0	3.62 (0.77)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
3. A list of objectives are included in the Secondary Chemistry Curriculum. To what degree do you feel that the curriculum content succeeded in achieving the following objectives: (cont'd)						
b. students acquisition of information and skills that will qualify them to continue their higher education studies in different scientific fields?	17.3	50.0	26.9	5.8	0.0	3.79 (0.80)
c. understanding the role of Chemistry in exploiting natural resources and available energy resources to increase national income and to raise the standard of living?	19.2	40.4	36.5	3.8	0.0	3.75 (0.81)
d. identifying causes and dangers of environmental - pollution by chemical and radioactive materials and identifying preventive means?	23.1	36.5	28.8	5.8	5.8	3.65 (1.08)
e. acquisition of the following skills:						
1. manipulation and maintenance of apparatus and laboratory equipment?	7.7	38.5	36.5	11.5	5.8	3.31 (0.98)
2. utilization of mathematical procedures to deduce laws and relations and apply them?	13.7	49.0	27.5	7.8	2.0	3.65 (0.89)
3. utilization of multi-sources of information, such as: references - trips - seminars, etc.?	5.8	25.0	28.8	25.0	15.4	2.81 (1.16)
4. interpretation of partial events and inter-relating them to arrive to general principles and laws?	3.8	42.3	40.4	9.6	3.8	3.33 (0.86)
5. application of laws and general principles to solve problems and interpret chemical phenomena?	7.7	46.2	32.7	7.7	5.8	3.42 (0.96)
f. students' acquisition of the scientific thinking through continuous application of theoretical and practical Chemistry topics during their study?	15.4	50.0	28.8	3.8	1.9	3.73 (0.84)
g. reinforcement of scientific attitude characterized by the following aspects:						
1. inference of events to their actual causes?	13.5	40.4	38.5	5.8	1.9	3.58 (0.87)
2. adoption of experimental method to test hypothesis?	19.2	32.7	36.5	9.6	1.9	3.58 (0.98)
3. no steadfastness to an opinion, but modifying it in light of new facts?	25.0	44.2	23.1	5.8	1.9	3.85 (0.94)
h. ensuring the belief in the Almighty Creator through studying His Laws in creation that show His Ability, Creativeness, Control, Neatness, Coherence and Beauty?	50.0	30.8	15.4	3.8	0.0	4.27 (0.87)
4. Some concepts are repeated in Physics and Chemistry. To what extent do you agree with the necessity of repetitive study of these concepts:						
a. laws of gases and kinetic theory of gases?	21.6	37.3	13.7	19.6	7.8	3.45 (1.25)
b. development of atomic model?	32.7	32.7	23.1	9.6	1.9	3.85 (1.06)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
4. Some concepts are repeated in Physics and Chemistry. To what extent do you agree with the necessity of repetitive study of these concepts: (cont'd)						
c. radioactivity?	34.6	40.4	11.5	9.6	3.8	3.92 (1.10)
d. electrical nature of matter, and Faraday's laws of electro-chemical analysis?	34.6	32.7	21.2	5.8	5.8	3.85 (1.14)
5. Chemistry Curriculum uses measuring units from different systems of units from different systems of units. To what degree do you see the following uses are necessary:						
a. employment of a variety of systems of units?	6.3	12.5	39.6	22.9	18.8	2.65 (1.12)
b. limit to the employment of (SI) units?	46.2	32.7	9.6	5.8	5.8	4.08 (1.15)
6. You have applied Chemistry curriculum at the Secondary level. To what extent do you agree on the soundness of the following statements:						
a. secondary curriculum content is a natural consequence of Preparatory Science Curriculum?	11.5	44.2	21.2	15.4	7.7	3.37 (1.12)
b. curriculum content is appropriate to the intellectual level of average students?	9.6	26.9	40.4	19.2	3.8	3.19 (0.99)
c. time allocated for curriculum completion is appropriate for theoretical and experimental topics?	9.8	17.6	27.5	31.4	13.7	2.78 (1.19)
d. curriculum topics are categorized at logical consequence?	5.8	38.5	38.5	13.5	3.8	3.29 (0.92)
e. curriculum achievement of basic Chemistry concepts in a hierarchical order of classes, such concepts are:						
1. development of atomic model?	23.1	55.8	13.5	7.7	0.0	3.94 (0.83)
2. electrical nature of elementary particles of matter?	7.7	51.9	34.6	5.8	0.0	3.62 (0.72)
3. quantitative chemical calculations?	17.6	51.0	23.5	5.9	2.0	3.77 (0.89)
4. periodicity in elements characteristics?	26.9	44.2	15.4	9.6	3.8	3.81 (1.07)
5. chemical equation as an expression of reaction and its dynamics?	28.8	46.2	13.5	11.5	0.0	3.92 (0.95)
7. The following are some basic concepts in Secondary Level Curriculum:						
First: Grade 1 Secondary						
Unit 1: Procedure of Scientific research in Chemistry:						
Descriptive study in the scientific method (objective-law-theory). To what degree do you feel that the topic is:						
1. appropriate for Grade 1 Secondary?	24.0	20.0	20.0	16.0	20.0	3.12 (1.47)
2. must be moved to a higher grade?	4.1	14.3	12.2	22.4	46.9	2.06 (1.25)
3. must be deleted from Secondary Level?	14.9	17.0	8.5	12.8	46.8	2.40 (1.57)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Units 2, 3, and 4: Structure of matter as atoms and molecules:						
The Scientific Model - Gas Laws - Elements and Compounds - Mole - Formulae - Laws of Chemical Combination - Gas Laws - Kinetic Theory - Avagadro's Hypothesis:						
a. To what degree do you feel that the content of these units:						
1. realizes units' objectives (structure of matter as atoms and molecules)?	19.6	51.0	19.6	3.9	5.9	3.75 (1.02)
2. logical consequence in topics is considered?	16.0	40.0	32.0	8.0	4.0	3.56 (0.99)
3. historical consequence in Chemistry is considered?	15.7	35.3	31.4	11.8	5.9	3.43 (1.08)
4. provides sufficient opportunity for training on writing a balanced chemical equation?	9.8	37.3	23.5	19.6	9.8	3.18 (1.16)
b. To what degree do you see that the Mole concept:						
1. is appropriate to the cognitive ability of the average student?	23.5	31.4	19.6	19.6	5.9	3.47 (1.22)
2. provides sufficient opportunity to employ it in chemical calculations?	17.6	41.2	29.4	5.9	5.9	3.59 (1.04)
Unit 7: Modern Periodic Table						
To what degree do you feel that this topic is:						
1. appropriate to the average student in this class?	15.7	37.3	37.3	7.8	2.0	3.57 (0.92)
2. crowded with sub-concepts that could be deleted from this class?	10.0	26.0	28.0	18.0	18.0	2.92 (1.26)
Second: Grade 2 Secondary (Science Section)						
Unit 1: Atomic structure and periodic Table:						
a. To what degree do you feel that the following topics need more details and depth:						
1. Electro-magnetic spectrum?	20.4	51.0	18.4	4.1	6.1	3.76 (1.03)
2. Photones (between Einstein and Max Blank)?	29.8	38.3	23.4	6.4	2.1	3.87 (0.99)
3. Balmer series?	25.5	34.0	23.4	10.6	6.4	3.62 (1.17)
Unit 2: Chemical Bonds and Molecular Structure						
A group of concepts are included in this unit. Some may be moved as they belong to, or are proper to subjects in Grade 3 Secondary. To what degree do you agree that the following concepts should be transferred to Grade 3 Secondary:						
1. double and triple bonds in Organic Compounds?	30.4	32.6	8.7	10.9	17.4	3.48 (1.47)
2. application using ethylene, acetylene, and ethylene diamine?	40.8	30.6	10.2	8.2	10.2	3.84 (1.33)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
A group of concepts are included in this unit. Some may be moved as they belong to, or are proper to subjects in Grade 3 Secondary. To what degree do you agree that the following concepts should be transferred to Grade 3 Secondary: (cont'd)						
3. hybridization and geometric forms of molecules?	20.4	32.7	12.2	12.2	22.4	3.16 (1.48)
4. isomerism and geometrical molecular structure?	20.8	31.3	18.8	10.4	18.8	3.25 (1.41)
Units: 3, 4, 5, and 6						
a. To what degree do you feel that the following concepts are appropriate to the standard of the student at Grade 2 Secondary "Scientific":						
1. heat of formation and heat of reaction?	33.3	52.1	8.3	4.2	2.1	4.10 (0.88)
2. application of Le-Chatelier principle?	33.3	45.8	18.8	0.0	2.1	4.08 (0.85)
3. chemical calculations by Mole method?	42.9	42.9	10.2	2.0	2.0	4.22 (0.87)
b. To what degree do you feel that the curriculum of Grade 2 Secondary "Scientific" provides:						
1. sufficient opportunity to carry out appropriate experiments?	12.8	25.5	29.8	19.1	12.8	3.06 (1.22)
2. sufficient opportunity for training on writing chemical equations?	8.3	29.2	27.1	22.9	12.5	2.98 (1.18)
3. adequate emphasis on relating curriculum concepts to economic activities and natural resources of Oman?	2.0	20.4	38.8	22.4	16.3	2.69 (1.05)
Third: Grade 3 Secondary (Science Section)						
Units: 1 and 2: acids, basics, oxidation and reduction						
In light of having taught these two units, to what degree do you see that the following are sound:						
1. the curriculum should give appropriate attention to the processes of volumetric analysis?	26.0	40.0	24.0	10.0	0.0	3.82 (0.94)
2. necessity of relating different indicators with the sensitivity of each to Hydrogen ion power (pH) value?	34.0	46.0	10.0	6.0	4.0	4.00 (1.03)
3. clear illustration of the concept of "oxidation number"?	38.8	40.8	14.3	2.0	4.1	4.08 (1.00)
4. most students can balance oxidation reduction reactions equations?	16.0	38.0	32.0	12.0	2.0	3.54 (0.97)
5. most students can apply oxidation reduction concepts in several aspects?	12.0	40.0	36.0	12.0	0.0	3.52 (0.86)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Unit 3: Organic Compounds						
1. to what degree do you see that the content of this unit is sufficient at this stage?	20.8	25.0	16.7	20.8	16.7	3.13 (1.41)
2. Organic compount must be started at:						
a. Grade 2 Secondary?	53.1	26.5	8.2	2.0	10.2	4.10 (1.28)
b. end of preparatory level?	14.0	14.0	8.0	18.0	46.0	2.32 (1.52)
3. to what degree do you see that chemical characteristics, reaction processes, methods of identification of compounds, must be added, and are not satisfied by the present teaching of physical characteristics?	33.3	41.7	12.5	8.3	4.2	3.92 (1.09)
4. To what extent the identification of basic elements in organic compounds, differentiation between Alyphatic and Aromatic compounds, must be added?	28.0	36.0	24.0	6.0	6.0	3.74 (1.12)
Unit 4: Biochemistry						
a. To what extent do you agree that it is better to add the following topics:						
1. hydro-analysis of starch?	14.0	24.0	30.0	14.0	18.0	3.02 (1.30)
2. effects of saturated fats on man's health?	22.0	40.0	20.0	10.0	8.0	3.58 (1.18)
3. notation on synthetization of some hormones and vitamins, and some of their benefits to man?	16.0	32.0	28.0	16.0	8.0	3.32 (1.17)
b. To what degree do you see that the following topics be deleted:						
1. complicated structural formulae of starch and cellulose?	56.0	20.0	6.0	8.0	10.0	4.04 (1.37)
2. complicated structural formulae of vitamins and industrial detergents?	59.2	20.4	6.1	6.1	8.2	4.16 (1.28)
Units 5 and 6: Study of Some Periods and Groups of the Periodic Table						
To what degree do you agree on the context of the following statements:						
1. it is preferable to forward to these units by transferring the following topics from Grade 2: factors affecting the chemical activity of elements?	28.0	44.0	16.0	6.0	6.0	3.82 (1.10)
2. it is preferable to emphasize, after studying the general characteristics, the characteristics of one of the elements of the group or small number of the elements of the period?	32.0	52.0	10.0	6.0	0.0	4.10 (0.81)
3. it is preferable to give more details (illustrations) on the following topics:						
a. extraction of known metals from their ores?	34.0	48.0	8.0	6.0	4.0	4.02 (1.02)
b. desalination of sea-water and treatment of hard-water?	43.8	41.7	8.3	4.2	2.1	4.21 (0.92)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
To what degree do you agree on the context of the following statements: (cont'd)						
4. To what degree do you see that more attention should be given to the topic of detection and identification of normal common basic and acidic ions?	41.7	41.7	12.5	0.0	4.2	4.17 (0.95)
5. To what degree do you feel that more attention should be given to differentiation between complex ions and double salts (practically)?	22.9	43.8	25.0	6.3	2.1	3.79 (0.94)
Unit 7: Radioactivity						
To what extent do you agree with the context of the following sentences:						
1. it is better to employ (SI) units instead of the c.g.s. system of units?	44.0	48.0	0.0	2.0	6.0	4.22 (1.02)
2. it is preferable to add to the curriculum these topics: "hazards of radioactive radiations, critical and permissible doses, protection from radiation?"	40.8	30.6	24.5	2.0	2.0	4.06 (0.97)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Physics
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term objectives considered when selecting and organizing Physics Curriculum content for Secondary Level?	14.3	42.9	30.4	10.7	1.8	3.57 (0.93)
2. To what extent are the number of weekly hours allocated for teaching Physics Curriculum sufficient to achieve the objectives of the curriculum namely - theoretical knowledge and experimental skills - for the following classes:						
a. Grade 1 (2 weekly hours)?	26.8	21.4	25.0	21.4	5.4	3.43 (1.25)
b. Grade 2 (4 weekly hours)?	52.8	28.3	11.3	5.7	1.9	4.25 (1.00)
c. Grade 3 (4 weekly hours)?	36.4	30.9	14.5	12.7	5.5	3.80 (1.22)
3. To what extent does Physics Curriculum encourage students to participate in scientific activities, such as: Science Club, contests, scientific fairs?	14.3	30.4	41.1	8.9	5.4	3.39 (1.02)
4. To what extent are integration and progression achieved in Physics Curriculum content for the three classes of the Secondary level?	10.7	30.4	44.6	12.5	1.8	3.36 (0.90)
5. To what extent is continuity realized between Science Curricula for Primary and Preparatory levels and Physics Curricula for Secondary level?	12.3	42.1	35.1	10.5	0.0	3.56 (0.85)
6. To what extent is integration realized between Physics Curriculum at the Secondary level and the curricula of other subject matters, as follows:						
a. Physics and Chemistry?	10.5	49.1	29.8	8.8	1.8	3.58 (0.87)
b. Physics and Mathematics?	44.6	33.9	14.3	0.0	7.1	4.09 (1.12)
c. Physics and Biology?	8.8	12.3	31.6	21.1	26.3	2.56 (1.25)
7. To what extent does the curriculum content and methodology encourage students to understand Physics as a systematic structure of knowledge methodology, and way of thinking?	14.8	37.0	35.2	11.1	1.9	3.52 (0.95)
8. To what extent do experimental and field studies according to Omani curriculum:						
a. form a complementary part of Physics Curriculum?	16.1	42.9	30.4	8.9	1.8	3.63 (0.93)
b. represent a basic part in teaching methods of Physics?	17.0	41.5	30.2	9.4	1.9	3.62 (0.95)
9. To what extent does the Physics Curriculum help students to develop basic attitudes and habits of critical thinking such as:						
a. suspended judgement?	28.1	45.6	21.1	3.5	1.8	3.95 (0.90)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
9. To what extent does the Physics Curriculum help students to develop basic attitudes and habits of critical thinking such as: (cont'd)						
b. testing the extent of correct data?	36.8	31.6	26.3	3.5	1.8	3.98 (0.97)
c. employment of variety of information-sources?	22.8	33.3	24.6	5.3	14.0	3.46 (1.30)
10. To what extent does the Physics Curriculum help students to develop the skills of logical thinking and the use of this method of thinking in relation to:						
a. deduction: employment and application of a general principle to specific cases and examples?	19.3	54.4	15.8	8.8	1.8	3.81 (0.92)
b. induction: deducing a general principle from the analysis, examplification, and studying of specific cases?	26.8	44.6	23.2	1.8	3.6	3.89 (0.95)
11. Included in Physics curriculum are a list of objectives that the curriculum tries to achieve. To what degree do you feel as a result of implementation of the curriculum that it has succeeded in realizing the following objectives:						
a. providing students with sufficient scientific and functional knowledge to enable him to adapt to scientific and techological development?	12.3	50.9	28.1	7.0	1.8	3.65 (0.86)
b. acquisition of the following skills:						
1. performing experiments, manipulation of laboratory equipment and apparatus, and carrying out accurate measurements?	14.3	44.6	28.6	8.9	3.6	3.57 (0.97)
2. interpretation and drawing of curves and their application to understand relations between variables for a particular phenomenon?	25.0	41.1	23.2	8.9	1.8	3.79 (0.99)
3. expressing Physics relationships in mathematical forms and application of theories and laws in solving problems in Physics?	42.9	37.5	8.9	5.4	5.4	4.07 (1.11)
c. developing sound scientific norms and attitudes in students, such as:						
1. intellectual objectivity and respect for others opinions?	22.8	42.1	24.6	8.8	1.8	3.75 (0.97)
2. science reading habit, scientific inquisitiveness, and the perception that scientific knowledge is not final, but can be modified?	21.1	47.4	12.3	14.0	5.3	3.65 (1.13)
3. scientific honesty, self-trust and dependence?	28.6	44.6	14.3	7.1	5.4	3.84 (1.09)
4. cooperation and valuing group work?	14.0	50.9	21.1	8.8	5.3	3.60 (1.02)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
c. developing sound scientific norms and attitudes in students, such as: (cont'd)						
5. development of student ability to solve problems by the following methodology: problem identification, data collection, hypothesis construction, testing of hypothesis, conclusion of appropriate relations or solution, and then application of these relations to similar cases?	29.8	29.8	26.3	8.8	5.3	3.70 (1.15)
12. Physics Curriculum in the Secondary Level grades consists of a number of independent units, to what degree do you feel that this approach in organizing subject matter material supplies the student with a sufficient degree of scientific knowledge in Physics?	14.3	37.5	35.7	10.7	1.8	3.52 (0.93)
13. To what degree do you feel that Physics Curriculum in each of the Secondary grades is appropriate for the students' cognitive maturity relevant to:						
a. amount of scientific knowledge?	6.5	54.8	25.8	12.9	0.0	3.55 (0.81)
b. level of topic treatment?	8.9	48.2	32.1	8.9	1.8	3.54 (0.85)
c. time allocated to study Physics in each grade?	8.8	36.8	31.6	17.5	5.3	3.26 (1.03)
d. cognitive skills necessary to comprehend and understand scientific knowledge inculcated in the curriculum?	22.8	29.8	31.6	8.8	7.0	3.53 (1.15)
14. To what extent is balance achieved among parts of the Physics Curriculum content material so that it is a systematic and coherent fiber of knowledge?	10.5	38.6	38.6	10.5	1.8	3.46 (0.89)
15. To what degree do you see curriculum coverage of Geometrical Optics (reflection and refraction laws, lenses, optical systems and computations) is sufficient?	8.8	31.6	43.9	15.8	0.0	3.33 (0.85)
16. To what degree do you see that curriculum coverage of main concepts of heat (heat transfer, expansion by heat, calorimetry) is sufficient?	10.5	35.1	22.8	22.8	8.8	3.16 (1.16)
17. To what extent do you agree with repeating some concepts in Physics and Chemistry Curricula at the Secondary level such as:						
a. laws of gases?	21.1	36.8	28.1	5.3	8.8	3.56 (1.15)
b. kinetic theory of gases?	26.3	31.6	26.3	8.8	7.0	3.61 (1.18)
c. development of atomic model?	25.0	35.7	23.2	12.5	3.6	3.66 (1.10)
d. radio-activity and the structure of the nucleus?	28.6	33.9	23.2	8.9	5.4	3.71 (1.14)
18. To what degree do you feel that the curriculum content has sufficiently covered each of its units:						

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
First: Grade 1 Secondary						
a. Unit 1: Physics and Measurement						
1. To what extent did the unit cover basic concepts of measurements and fundamental and derived units of physical quantities?	19.6	50.0	25.0	1.8	3.6	3.80 (0.90)
2. To what extent are concepts of vector product of two vectors and scalor product of two vectors illustrated?	7.3	20.0	40.0	23.6	9.1	2.93 (1.05)
3. To what extent is the unit concerned with developing basic skills of measurement, the correlation between errors, accuracy of measurement and significant figures?	16.4	40.0	21.8	16.4	5.5	3.46 (1.12)
4. To what extent does the curriculum assure the continuous application of already presented concepts as application of SI units?	26.8	39.3	26.8	7.1	0.0	3.86 (0.90)
b. Unit 2: Motion, Force, and Work						
1. To what extent are basic concepts of motion, force, work, power, energy, and energy transformations illustrated?	21.4	55.4	21.4	1.8	0.0	3.96 (0.71)
2. To what extent was mathematical treatment of momentum and its relations to Newton's second law, illustrated?	25.0	48.2	16.1	7.1	3.6	3.84 (1.01)
3. To what extent does the unit cover experimental and practical work necessary to develop student's skills of measuring time and calculating velocity and acceleration and emphasize the basic concepts and mathematical expressions of motion, work, and power?	14.3	42.9	28.6	10.7	3.6	3.54 (0.99)
c. Unit 3: Liquids						
1. To what extent are the concepts of pressure distribution in hydrostatics and its application to derive the upthrust and Archimedes principle illustrated?	12.5	53.6	21.4	10.7	1.8	3.64 (0.90)
2. To what extent were the following concepts illustrated: Motion of Liquids, Flow lines, Flow pipe uplifting force, coefficient of viscosity in dynamic liquids and mathematical expressions relating these quantities to each other?	10.7	44.6	32.1	10.7	1.8	3.52 (0.89)
3. To what extent are laboratory experiments supporting concepts of this unit sufficient?	10.7	17.9	46.4	19.6	5.4	3.09 (1.01)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Second: Grade 2 Secondary						
a. Unit 1: Laws of Conservation of Mass and Energy.						
1. To what extent does the unit emphasize the following concepts: Closed system, Energy transformations, conservation of linear and angular momentum, and energy-mass equivalence?	22.6	52.8	17.0	5.7	1.9	3.89 (0.89)
2. To what extent are illustrations made in the mathematical treatment of: elastic and inelastic collision, coefficient of buoyance, inertia and laws of conservation?	20.8	43.4	28.3	3.8	3.8	3.74 (0.96)
3. To what extent are laboratory experiments sufficient to support student comprehension of these concepts?	13.5	15.4	36.5	26.9	7.7	3.00 (1.14)
b. Unit 2: Heat and Thermodynamics.						
1. To what extent are the following basic concepts illustrated: Kinetic Theory of Gases - gas laws and ideal gas, isothermal, adiabatic and isobaric gas processes, Second Law of Thermodynamics?	20.8	50.9	20.8	5.7	1.9	3.83 (0.89)
2. To what extent are mathematical treatments of Kinetic theory of gases and pressure of Ideal Gas fully illustrated?	15.1	35.8	34.0	9.4	5.7	3.45 (1.05)
3. To what extent are laboratory experiments sufficient to support these concepts to students?	9.6	19.2	40.4	21.2	9.6	2.98 (1.09)
c. Unit 3: Wave Nature.						
1. To what extent does the curriculum cover the concepts of wave - motion and its structure as a means of transfer of energy?	13.2	60.4	20.8	3.8	1.9	3.79 (0.79)
2. To what extent are basic concepts of physical optics (interference and diffraction) fully illustrated?	11.5	44.2	30.8	11.5	1.9	3.52 (0.92)
3. To what extent are laboratory experiment in the curriculum sufficient to support these concepts to students?	7.7	32.7	38.5	21.2	0.0	3.27 (0.89)
Third: Grade 3 Secondary						
a. Unit 1: Fields and Forces.						
1. To what extent are basic concepts such as: electric field, electric flux, electric potential, magnetic field, Ohm's law, Kirchov's laws and electromagnetic induction illustrated?	28.8	61.5	7.7	1.9	0.0	4.17 (0.65)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
a. Unit 1: Fields and Forces (cont'd).						
2. To what extent is there a clear illustration for the correlation between concepts of different fields (electric, magnetic and gravity), and the forces resulting from these fields?	22.6	49.1	22.6	3.8	1.9	3.87 (0.88)
3. To what extent is there a clear illustration for the correlation between mathematical expressions for field intensity, force, and potential energy of these fields?	28.3	35.8	28.3	7.5	0.0	3.85 (0.93)
4. To what extent are laboratory and practical experiments sufficient to support these concepts to students?	13.2	26.4	35.8	15.1	9.4	3.19 (1.14)
b. Unit 2: Structure of the Atom and Modern Quantum Theory.						
1. To what extent does this unit add to the concepts previously studied by the student in Chemistry Curriculum of Grade 2 Secondary?	11.3	54.7	24.5	7.5	1.9	3.66 (0.85)
2. To what extent are other basic concepts clearly illustrated such as: atomic spectra and their relation to atomic structure - modern quantum theory - de Broglie Waves and electron diffraction - Heizenberg uncertainty principle and Paulie exclusion principle?	21.6	49.0	21.6	5.9	2.0	3.82 (0.91)
3. To what extent are laboratory work and practical experiments sufficient to support student comprehension of these concepts?	7.7	28.8	28.8	25.0	9.6	3.00 (1.12)
d. Unit 3: Atomic Nucleus and Radioactivity.						
1. To what extent was new content added in this unit supplementing the concepts already included in Chemistry?	6.0	58.0	26.0	6.0	4.0	3.56 (0.86)
2. To what extent is there a clear illustration of the correlation between nuclear field and other fields previously studied in Unit 1?	11.3	50.9	26.4	5.7	5.7	3.57 (0.97)
3. To what extent were the following concepts illustrated: nuclear binding energy, nuclear potential, binding energy curve, and energy of nuclear fission and fusion?	17.0	45.3	30.2	7.5	0.0	3.72 (0.84)
4. To what extent are laboratory work and practical experiments in sufficient to illustrate and re-inforce student comprehension of basic concepts in this Unit?	7.5	30.2	24.5	22.6	15.1	2.93 (1.21)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Biology
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were long-term objectives for education in Oman in general and at secondary level in particular considered when selecting and organizing curriculum content of the Biology Curriculum?	22.0	42.0	28.0	6.0	2.0	3.76 (0.94)
2. To what degree do you consider time allocated in the school schedule for biology adequate to achieve the objectives of this curriculum including knowledge structure and skill development at the following classes:						
a. Grade 1 (2 weekly hours)?	44.9	18.4	30.6	4.1	2.0	4.00 (1.06)
b. Grade 2 (3 weekly hours)?	40.0	20.0	20.0	18.0	2.0	3.78 (1.22)
c. Grade 3 (3 weekly hours)?	49.0	20.4	20.4	8.2	2.0	4.06 (1.11)
3. To what extent did the curriculum emphasize the viewpoints of and illustrate coherence between Islam and scientific theories on creation and evolution issues in such a manner that confusion and doubt were eliminated from the mind of the learner?	38.8	36.7	18.4	2.0	4.1	4.04 (1.02)
4. To what extent are integration and continuity illustrated in expanding and deepening biological and environmental concepts in the Biology Curriculum for Grade 1 through Grade 3 Secondary?	23.5	43.1	27.5	3.9	2.0	3.82 (0.91)
5. To what extent are balance in quantity and method of treatment and strength illustrated in each of the biology topics at the secondary level?	21.6	43.1	27.5	5.9	2.0	3.77 (0.93)
6. To what extent do you see topic sequence in the Biology Curriculum for Grade 1 Secondary is the correct sequence considering the following aspects:						
a. logical sequence of topics and graduation of difficulty and depth?	19.6	45.1	23.5	3.9	7.8	3.65 (1.09)
b. students' interest satisfaction and their physical and intellectual maturity in response to their normal questions at the appropriate time?	24.0	40.0	22.0	12.0	2.0	3.72 (1.03)
7. To what extent does the Biology Curriculum for secondary grades encourage students to enroll in some scientific activities and biology-oriented societies such as: environmental conservation groups, preservation and animals groups, and other groups?	14.3	36.7	34.7	4.1	10.2	3.41 (1.'2)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
8. To what extent does the Biology Curriculum for secondary grades encourage inquisitiveness, experimental and field studies, and study of Omani botany and zoology as extra-curricular activity and a self-learning method?	21.6	37.3	31.4	5.9	3.9	3.67 (1.01)
9. To what extent does the Biology Curriculum help students understand that biology is a system structure of knowledge, as well as a method of research, thinking, and studying?	25.5	52.9	17.6	3.9	0.0	4.00 (0.78)
10. To what extent does the Biology Curriculum help students develop such attitudes and basic thinking habits as the following:						
a. postponing judgement?	21.6	49.0	25.5	3.9	0.0	3.88 (0.79)
b. testing the accuracy of data?	23.5	41.2	29.4	5.9	0.0	3.82 (0.87)
c. evaluating data sources?	14.0	52.0	30.0	4.0	0.0	3.76 (0.74)
d. utilizing varied information sources?	22.9	45.8	18.8	8.3	4.2	3.75 (1.04)
11. To what extent does the Biology Curriculum help students develop such attitudes and basic logical thinking habits as the following:						
a. deduction: employment and application of general principle to group of examples and specific cases?	27.5	43.1	19.6	7.8	2.0	3.86 (0.98)
b. induction: inference of a general principle or law from the analysis and study of group of examples and particular cases?	30.0	40.0	26.0	4.0	0.0	3.96 (0.86)
12. To what extent does the Biology Curriculum help students develop the ability to form basic scientific concepts through:						
a. study and analysis of observation and results collected from a variety of living things?	34.6	32.7	26.9	5.8	0.0	3.96 (0.93)
b. assimilating common factors among groups of these species in order to arrive at generalized concepts about: birds, reptiles, vertebrated animals, etc.?	36.5	40.4	15.4	7.7	0.0	4.06 (0.92)
13. To what extent does the Biology Curriculum help students understand solving method for specific problems related to environmental studies and human health through the following:						
a. awakening consciousness and problem sensing?	25.0	50.0	17.3	5.8	1.9	3.90 (0.91)
b. studying scope and phenomenon of the problem and gathering information about it?	17.6	35.3	31.4	15.7	0.0	3.55 (0.97)
c. information analysis in order to arrive at the real causes of the problem?	25.5	35.3	29.4	9.8	0.0	3.77 (0.95)
d. hypothesizing a group of solutions?	10.2	44.9	30.6	12.2	2.0	3.49 (0.92)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent does the Biology Curriculum help students understand solving method for specific problems related to environmental studies and human health through the following: (cont'd)						
e. testing each hypothesis and application possibility?	16.0	44.0	24.0	14.0	2.0	3.58 (0.99)
f. arriving at most appropriate solution and presenting a strategy for implementation?	16.0	38.0	30.0	14.0	2.0	3.52 (1.00)
g. group discussion and follow-up on problem solving?	25.0	34.6	25.0	13.5	1.9	3.67 (1.06)
14. To what extent does the Biology Curriculum for secondary grades help students gain psychomotor and cognitive skills necessary to study science and biology in particular through:						
a. familiarization with apparatus and equipment and methods of operation and maintenance?	24.5	42.9	22.4	8.2	2.0	3.80 (0.98)
b. generalized experiments to study a phenomenon or a specific problem?	18.8	37.5	35.4	8.3	0.0	3.67 (0.88)
c. conducting experiments?	33.3	39.2	23.5	2.0	2.0	4.00 (0.92)
d. collecting data and classifying it in such a way as to simplify study and analysis?	13.7	43.1	29.4	11.8	2.0	3.55 (0.95)
e. representing the data graphically?	7.7	17.3	30.8	36.5	7.7	2.81 (1.07)
f. presenting the data in the form of accurate scientific reports illustrated by drawings and figures?	21.2	32.7	21.2	17.3	7.7	3.42 (1.23)
15. To what degree do you feel that experimental and field studies represent in the Omani Biology Curriculum are:						
a. an integrative and important part of the Biology Curriculum?	43.1	27.5	11.8	11.8	5.9	3.90 (1.25)
b. a basic part of the teaching method in biology?	43.1	25.5	19.6	5.9	5.9	3.94 (1.19)
c. a basic part for evaluating students in this subject-matter?	26.9	38.5	23.1	7.7	3.8	3.77 (1.06)
16. To what extent does studying the Omani Biology Curriculum lead to illustrating the mystery of creation and the universe and to developing man's appreciation of The Creator's Absolute Greatness in this universe's creation, organization, and protection of natural balance of the planet earth?	39.2	43.1	15.7	0.0	2.0	4.18 (0.84)
17. To what extent does Omani Biology Curriculum contribute to familiarizing the student with natural resources, environmental dangers, sound exploitation of resources, and environment conservation?	34.0	36.0	18.0	10.0	2.0	3.90 (1.06)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
18. To what extent is integration accomplished between the Biology Curriculum and the other Science Curricula at the secondary level:						
a. Biology and Chemistry?	33.3	43.1	15.7	3.9	3.9	3.98 (1.01)
b. Biology and Physics?	9.8	35.3	31.4	13.7	9.8	3.22 (1.12)
c. Biology and Mathematics?	13.7	15.7	37.3	15.7	17.6	2.92 (1.26)
d. Biology and Social Studies?	9.8	35.3	35.3	11.8	7.8	3.28 (1.06)
19. A list of objectives to be achieved is included in the Biology Curriculum. To what degree do you feel that during your implementation of the curriculum, the curriculum realized the following objectives:						
a. developing the student's interest in his natural environment?	26.9	36.5	32.7	3.8	0.0	3.87 (0.86)
b. developing the student's consciousness of general health principles and how to conserve his body?	29.4	47.1	23.5	0.0	0.0	4.06 (0.73)
c. not accepting myths concerning health and disease issues, but determining cause and effect cases?	32.7	42.9	18.4	6.1	0.0	4.02 (0.88)
d. adopting experimental method as a means of confirming the student's environmental knowledge?	22.0	44.0	26.0	6.0	2.0	3.78 (0.93)
e. adopting scientific thinking methodology in solving his problems as an individual and also in studying and suggesting solutions to social problems?	23.1	42.3	30.8	1.9	1.9	3.83 (0.88)
f. independence in thinking and not being guided by other people's opinions except after revision and conviction of their truth?	26.0	44.0	24.0	4.0	2.0	3.88 (0.92)
g. cooperation in work and research to study environmental problems and related social problems?	21.2	36.5	30.8	7.7	3.8	3.64 (1.03)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena:						
First: Grade 1 Secondary						
Unit 1:						
a. health and disease?	21.4	31.0	19.0	4.8	23.8	3.21 (1.47)
Unit 2:						
a. earth layers - earth crust - earth sphere?	18.8	60.4	20.8	0.0	0.0	3.98 (0.64)
b. rocks and soil?	21.3	53.2	19.1	4.3	2.1	3.87 (0.88)
c. factors leading to earth's surface topography?	14.6	41.7	37.5	6.3	0.0	3.65 (0.81)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
d. aerosphere?	20.8	41.7	35.4	2.1	0.0	3.81 (0.79)
e. man's biological environment?	27.1	37.5	20.8	14.6	0.0	3.77 (1.02)
f. geologic eras?	6.3	20.8	39.6	16.7	16.7	2.83 (1.14)
Unit 3:						
a. the living organism?	23.4	55.3	8.5	8.5	4.3	3.85 (1.02)
b. organic and inorganic compounds?	21.7	41.3	28.3	4.3	4.3	3.72 (1.00)
c. living matter?	25.5	44.7	19.1	8.5	2.1	3.83 (0.99)
d. protoplasm?	21.3	46.8	23.4	6.4	2.1	3.79 (0.93)
e. protozoa?	31.9	36.2	19.1	10.6	2.1	3.85 (1.06)
f. autotrophs & heterotrophs?	33.3	39.6	20.8	2.1	4.2	3.96 (1.01)
g. incideental creation?	34.0	40.4	12.8	6.4	6.4	3.89 (1.15)
h. theory and fact, and the difference between them cohering change?	25.5	31.9	23.4	10.6	8.5	3.55 (1.23)
i. concept of creation in the Qura'n?	41.7	37.5	10.4	4.2	6.3	4.04 (1.13)
Unit 4:						
a. variations in living organisms (form and function)?	28.3	58.7	6.5	4.3	2.2	4.07 (0.85)
b. adaptation?	31.9	42.6	19.1	4.3	2.1	3.98 (0.94)
c. natural selection?	29.8	53.2	12.8	0.0	4.3	4.04 (0.91)
d. mutation?	19.1	38.3	29.8	8.5	4.3	3.60 (1.04)
e. evolution of living organisms?	23.4	40.4	27.7	4.3	4.3	3.75 (1.01)
f. classification?	27.7	42.6	19.1	8.5	2.1	3.85 (1.00)
g. species?	21.3	38.3	25.5	10.6	4.3	3.62 (1.07)
h. scientific name for the living organisms?	29.8	27.7	21.3	19.1	2.1	3.64 (1.17)
i. four kingdoms of living organisms?	23.9	56.5	10.9	8.7	0.0	3.96 (0.84)
j. classification basis and method of choice?	35.6	37.8	11.1	13.3	2.2	3.91 (1.10)
Unit 5:						
a. micro-organisms?	38.3	36.2	14.9	8.5	2.1	4.00 (1.04)
b. viruses?	32.6	39.1	17.4	10.9	0.0	3.94 (0.98)
c. bacteria?	30.4	34.8	23.9	10.9	0.0	3.85 (0.99)
d. algae?	29.8	34.0	23.4	10.6	2.1	3.79 (1.06)
e. fungi?	32.6	32.6	26.1	8.7	0.0	3.89 (0.97)
f. bread molds?	21.3	46.8	23.4	8.5	0.0	3.81 (0.88)
g. metaphyta & monera?	23.9	43.5	19.6	13.0	0.0	3.78 (0.96)
h. vertebrates and invertebrates?	23.9	50.0	17.4	8.7	0.0	3.89 (0.88)
i. classification of vertebrates and invertebrates?	22.2	55.6	13.3	6.7	2.2	3.89 (0.91)
Unit 6:						
a. what is an Ecosystem?	8.9	42.2	33.3	15.6	0.0	3.44 (0.87)
b. several Ecosystems, and their classification?	6.8	45.5	34.1	11.4	2.3	3.43 (0.87)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
Second: Grade 2 Secondary						
Unit 1:						
a. living cell?	51.2	39.5	7.0	2.3	0.0	4.40 (0.73)
b. structure of the living cell and particular functions?	37.2	46.5	14.0	2.3	0.0	4.19 (0.76)
c. cell material?	38.1	42.9	16.7	2.4	0.0	4.17 (0.79)
d. carbohydrates?	37.2	44.2	14.0	2.3	2.3	4.12 (0.91)
e. proteins?	39.5	41.9	14.0	2.3	2.3	4.14 (0.92)
f. fats?	40.5	40.5	14.3	2.4	2.4	4.14 (0.93)
g. nucleic acids?	35.7	42.9	16.7	2.4	2.4	4.07 (0.92)
h. protoplasm?	42.9	40.5	11.9	4.8	0.0	4.21 (0.84)
i. types of solutions?	34.9	41.9	18.6	2.3	2.3	4.05 (0.93)
j. ionic and non-ionic substances?	18.6	39.5	30.2	9.3	2.3	3.63 (0.98)
k. concept of diffusion and permeability in living cells?	34.9	46.5	11.6	7.0	0.0	4.09 (0.87)
l. osmosis and osmotic pressure?	31.7	43.9	19.5	4.9	0.0	4.02 (0.85)
m. plasmolysis and turgor and their relation to osmosis?	26.2	45.2	19.0	9.5	0.0	3.88 (0.92)
n. photosynthesis?	46.5	34.9	11.6	4.7	2.3	4.19 (0.98)
o. aerobic and anaerobic respiration?	34.9	41.9	18.6	2.3	2.3	4.05 (0.93)
p. metabolism in living organisms?	34.9	44.2	18.6	0.0	2.3	4.09 (0.87)
q. cellular fission and mitoses?	44.2	46.5	4.7	2.3	2.3	4.28 (0.95)
Unit 2:						
a. functional specialization in the cells of living organisms?	23.8	54.8	16.7	2.4	2.4	3.95 (0.85)
b. variation of structure of cells according to function?	23.3	62.8	7.0	4.7	2.3	4.00 (0.85)
c. kinds of plant tissues?	35.7	50.0	9.5	0.0	4.8	4.12 (0.94)
d. kinds of animal tissues?	31.0	42.9	21.4	2.4	2.4	3.98 (0.92)
Unit 3:						
a. concept of system in the specialized living organism?	34.1	48.8	12.2	4.9	0.0	4.12 (0.81)
b. photosynthesis systems - pors system?	26.2	50.0	19.0	4.8	0.0	3.98 (0.81)
c. elements necessary for photosynthesis?	35.0	55.0	5.0	5.0	0.0	4.20 (0.76)
d. transpiration through stomata?	39.5	41.9	11.6	7.0	0.0	4.14 (0.89)
e. concept of photo-parameters?	33.3	42.9	16.7	7.1	0.0	4.02 (0.90)
f. electronic activation?	11.9	35.7	33.3	11.9	7.1	3.33 (1.07)
g. atmospheric carbon fixation?	22.0	41.5	22.0	12.2	2.4	3.68 (1.04)
h. concept of digestion and the digestive system?	47.5	35.0	15.0	2.5	0.0	4.28 (0.82)
i. catabolism and anabolism?	48.8	34.1	12.2	4.9	0.0	4.27 (0.87)
j. concept of (transport) in the body of the living organism?	41.5	48.8	7.3	0.0	2.4	4.27 (0.81)
k. transport in plants?	38.1	45.2	11.9	2.4	2.4	4.14 (0.90)
l. transport in animals?	47.6	38.1	11.9	0.0	2.4	4.29 (0.86)
m. circulatory system - open and closed circulatory systems?	51.2	39.0	7.3	0.0	2.4	4.37 (0.83)
n. circulatory system in man?	57.1	38.1	2.4	2.4	0.0	4.50 (0.67)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
o. the blood - blood coagulation?	52.4	31.0	14.3	2.4	0.0	4.33 (0.82)
p. lymph - lymphatic system?	33.3	45.2	21.4	0.0	0.0	4.12 (0.74)
q. excretion - excretory system?	33.3	57.1	7.1	2.4	0.0	4.21 (0.68)
r. excretory system in plants?	42.9	45.2	9.5	0.0	2.4	4.26 (0.83)
s. variety of excretory methods and systems in animals?	42.9	38.1	16.7	0.0	2.4	4.19 (0.89)
t. support in plant and animals?	39.0	39.0	19.5	2.4	0.0	4.15 (0.82)
u. skeleton (skeletal system) in animals?	50.0	38.1	9.5	2.4	0.0	4.36 (0.76)
v. exoskeletal system?	42.5	42.5	12.5	0.0	2.5	4.23 (0.86)
w. endoskeletal system?	50.0	33.3	14.3	0.0	2.4	4.29 (0.89)
x. skeleton in man?	48.8	39.0	7.3	4.9	0.0	4.32 (0.82)
Third: Grade 3 Secondary						
Unit 1:						
a. movement in living organisms?	40.5	50.0	4.8	2.4	2.4	4.24 (0.85)
b. muscular system?	50.0	35.7	11.9	0.0	2.4	4.31 (0.87)
c. variation of types and methods of motion in living organisms?	47.6	28.6	19.0	4.8	0.0	4.19 (0.92)
d. specialization in muscular tissues?	33.3	40.5	16.7	7.1	2.4	3.95 (1.01)
e. concept of coherent functions in specialized living organisms?	42.9	38.1	16.7	2.4	0.0	4.21 (0.81)
f. concept of sensation?	40.0	55.0	2.5	2.5	0.0	4.33 (0.66)
g. concept of nervous system?	52.5	35.0	12.5	0.0	0.0	4.40 (0.71)
h. neuro-muscular coherence?	35.0	47.5	17.5	0.0	0.0	4.18 (0.71)
i. mechanical varieties of neuro-muscular coherence in living organisms?	26.8	51.2	17.1	2.4	2.4	3.98 (0.88)
j. types of nervous cells?	45.2	42.9	9.5	2.4	0.0	4.31 (0.75)
k. nerve impulse?	40.5	26.2	19.0	9.5	4.8	3.88 (1.19)
l. polarization?	38.1	26.2	16.7	14.3	4.8	3.79 (1.24)
m. central nervous system?	42.9	40.5	14.3	0.0	2.4	4.21 (0.87)
n. peripheral nervous system?	45.2	28.6	23.8	2.4	0.0	4.17 (0.88)
o. variation nerve impulse according to different sense organs?	41.5	41.5	12.2	2.4	2.4	4.17 (0.92)
p. hormones?	42.9	50.0	7.1	0.0	0.0	4.36 (0.62)
q. auxins responsible for growth in plants?	37.5	50.0	12.5	0.0	0.0	4.25 (0.67)
r. phototropism & geotropism?	37.5	55.0	2.5	2.5	2.5	4.23 (0.83)
s. flower hormones?	33.3	52.4	11.9	2.4	0.0	4.17 (0.73)
t. hormonic organization in animals?	38.1	57.1	2.4	2.4	0.0	4.31 (0.64)
u. hormone excreting glands, their types, and the type of hormones they excrete?	35.7	52.4	9.5	0.0	2.4	4.19 (0.80)
v. neuro - hormonic coherence?	31.7	46.3	19.5	2.4	0.0	4.07 (0.79)
w. sexual and asexual reproduction?	45.2	47.6	2.4	2.4	2.4	4.31 (0.84)
x. varied forms of sexual and asexual reproduction in living organisms?	41.5	48.8	4.9	2.4	2.4	4.24 (0.86)
y. male and female gametogenesis and method of their formation?	48.8	29.3	14.6	7.3	0.0	4.20 (0.95)
z. meiosis?	41.5	39.0	9.8	9.8	0.0	4.12 (0.95)
aa. fertilization?	59.0	25.6	12.8	2.6	0.0	4.41 (0.82)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
bb. various forms of sexual reproduction in living organisms?	52.5	42.5	5.0	0.0	0.0	4.48 (0.60)
cc. reproduction in man and the human reproductive systems?	70.0	27.5	2.5	0.0	0.0	4.68 (0.53)
Unit 2:						
a. concept of homeostasis?	40.5	50.0	9.5	0.0	0.0	4.31 (0.64)
b. concept of digestion and its relation to homeostasis?	38.1	50.0	9.5	2.4	0.0	4.24 (0.73)
c. concept of respiration and its relation to homeostasis?	35.7	50.0	14.3	0.0	0.0	4.21 (0.68)
d. concept of excretion and its relation to homeostasis?	33.3	47.6	19.0	0.0	0.0	4.14 (0.72)
e. body temperature regulation and the role of skin and circulatory system?	43.9	43.9	12.2	0.0	0.0	4.32 (0.69)
f. role of hormones in homeostasis?	31.7	53.7	12.2	2.4	0.0	4.15 (0.73)
g. role of nervous system in homeostasis?	33.3	52.4	11.9	2.4	0.0	4.17 (0.73)
Unit 3:						
a. concept of genetics?	52.4	42.9	4.8	0.0	0.0	4.48 (0.59)
b. concept of heredity?	40.0	42.5	15.0	2.5	0.0	4.20 (0.79)
c. Mendel's law?	45.0	42.5	12.5	0.0	0.0	4.33 (0.69)
d. chromosomes carrrying hereditary characteristics?	42.9	38.1	14.3	4.8	0.0	4.19 (0.86)
e. hereditary basis are chemical?	21.4	57.1	9.5	7.1	4.8	3.83 (1.01)
f. D.N.A.?	40.5	38.1	14.3	4.8	2.4	4.10 (0.98)
g. heredity code?	26.2	42.9	26.2	0.0	4.8	3.86 (0.98)
h. genes and the carrying of heredity characteristics?	33.3	52.4	11.9	2.4	0.0	4.17 (0.73)
i. genetic mutation?	23.8	57.1	9.5	4.8	4.8	3.91 (0.98)
j. complete and incomplete dominance?	35.7	45.2	7.1	7.1	4.8	4.00 (1.08)
k. genetic reactions?	26.2	47.6	11.9	9.5	4.8	3.81 (1.09)
l. case of incomplete dominance?	31.7	43.9	14.6	7.3	2.4	3.95 (1.00)
m. fatal factors?	35.7	38.1	21.4	2.4	2.4	4.02 (0.95)
n. multiplicative factors?	26.7	44.4	20.0	2.2	6.7	3.82 (1.07)
o. sexual chromosomes and birth control?	31.1	53.3	8.9	2.2	4.4	4.04 (0.95)
p. varied forms and variation of species affected characteristics in animals?	26.8	46.3	17.1	7.3	2.4	3.88 (0.98)
q. some genetic diseases?	20.9	60.5	11.6	4.7	2.3	3.93 (0.86)
r. varieties of genetic diseases?	17.5	60.0	17.5	5.0	0.0	3.90 (0.74)
s. inherited predisposition certain diseases?	22.5	52.5	15.0	10.0	0.0	3.88 (0.88)
t. improve reproduction through genetic engineering?	31.8	45.5	18.2	4.5	0.0	4.05 (0.83)
Unit 4:						
a. concept of ecology?	42.5	45.0	7.5	2.5	2.5	4.23 (0.89)
b. factors affecting environment?	40.0	40.0	13.3	4.4	2.2	4.11 (0.96)
c. atmospheric factors (light - intensity of light - light duration - heat and humidity - gases and winds)?	28.9	51.1	6.7	8.9	4.4	3.91 (1.06)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
d. location factors (altitude and latitude)?	33.3	48.9	8.9	4.4	4.4	4.02 (1.01)
e. soil factors?	38.6	47.7	6.8	4.5	2.3	4.16 (0.91)
f. water factor?	28.2	61.5	5.1	2.6	2.6	4.10 (0.82)
g. chemical factors?	30.2	53.5	9.3	2.3	4.7	4.02 (0.96)
h. biological factors and natural and dynamic balance in ecological activities?	33.3	51.3	10.3	2.6	2.6	4.10 (0.88)
i. matter and energy cycle?	16.3	60.5	16.3	4.7	2.3	3.84 (0.84)
j. gas-cycle (oxygen-carbon dioxide-nitrogen) in nature?	30.2	37.2	23.3	4.7	4.7	3.84 (1.07)
k. water cycle in nature?	39.5	44.7	7.9	5.3	2.6	4.13 (0.96)
l. food chain and food network?	36.8	31.6	26.3	2.6	2.6	3.97 (1.00)
m. products and consumptions?	37.8	43.2	10.8	5.4	2.7	4.08 (0.98)
n. food pyramid?	27.9	51.2	14.0	2.3	4.7	3.95 (0.98)
o. environmental pollution?	34.9	41.9	16.3	2.3	4.7	4.00 (1.02)
21. To what degree do you feel that there is a clear intellectual error attached to Biology topics in each of the following classes:						
a. as for topics of Grade 1?	22.2	31.1	33.3	6.7	6.7	3.56 (1.12)
b. as for topics of Grade 2?	24.4	40.0	20.0	6.7	8.9	3.64 (1.19)
c. as for topics of Grade 3?	31.8	47.7	13.6	2.3	4.5	4.00 (0.99)
22. To what degree do you feel that concentrating on environment topics in Grade 1 and Grade 3 and not teaching them at Grade 2 is a good and desired division?	13.3	24.4	40.0	13.3	8.9	3.20 (1.12)
23. To what degree do you feel that it is better to study all environment topics as an integrated topic in one class?	28.3	34.8	17.4	13.0	6.5	3.65 (1.22)
24. To what degree do you feel that dividing the topic systems and biological functions between Grades 2 and 3 is a desired method?	27.3	50.0	9.1	6.8	6.8	3.84 (1.12)
25. To what degree have the suggested curriculum and teaching methods in teachers' manual given sufficient importance to student experimental study in biology?	22.7	36.4	29.5	6.8	4.5	3.66 (1.06)
26. To what extent are apparatus such as microscopes and dissection equipment available to allow every student to experiment by himself?	11.4	22.7	20.5	20.5	25.0	2.75 (1.37)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
27. To what extent are living organism species under study sufficiently available for demonstration and laboratory experimentation lessons so as to allow students to study by themselves?	14.9	12.8	40.4	23.4	8.5	3.02 (1.15)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Human Culture
(Teacher)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani Human Culture Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Human Culture Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	26.7	26.7	46.7	0.0	0.0	3.80 (0.85)
2. To what extent does the curricula of Human Culture, Civic Education, and History realize the following:						
a. needs of student after graduation?	24.2	18.2	33.3	21.2	3.0	3.39 (1.17)
b. long-range educational objectives?	24.2	30.3	27.3	18.2	0.0	3.61 (1.06)
c. integration with the topics of both the preparatory and secondary levels?	22.6	25.8	35.5	9.7	6.5	3.48 (1.15)
d. coherence among topics and logical sequence?	29.0	32.3	22.6	16.1	0.0	3.74 (1.06)
e. emphasis on contemporary issues and current events?	30.3	30.3	21.2	15.2	3.0	3.70 (1.16)
f. horizontal (parallel) integration among subjects - Human Culture, Civic Education, and History?	22.6	38.7	19.4	9.7	9.7	3.55 (1.23)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	33.3	27.3	27.3	12.1	0.0	3.82 (1.04)
b. utilizing the environment as a source of learning?	27.3	21.2	39.4	12.1	0.0	3.64 (1.03)
c. library reference work and field research?	18.8	18.8	25.0	25.0	12.5	3.06 (1.32)
d. training in collection of information through scientific methods?	21.2	24.2	30.3	18.2	6.1	3.36 (1.19)
e. Using media as educational material?	27.3	27.3	33.3	6.1	6.1	3.64 (1.14)
4. To what extent does coherence exist between the three curricula (Human Culture, Civic Education and History) and each of the following:						
a. Geography?	23.3	26.7	33.3	13.3	3.3	3.53 (1.11)
b. Contemporary Problems?	33.3	33.3	20.0	6.7	6.7	3.80 (1.19)
c. Islamic Education?	41.9	38.7	9.7	6.5	3.2	4.10 (1.04)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. History?	41.9	22.6	9.7	9.7	16.1	3.65 (1.52)
b. Civic Education?	18.8	6.3	18.8	21.9	34.4	2.53 (1.50)
c. Human Culture?	40.0	24.0	12.0	16.0	8.0	3.72 (1.37)
6. To what extent do the three curricula (History, Human Culture, and Civic Education) foster the following educational attitudes:						
a. direct reference to the original texts?	16.1	48.4	12.9	12.9	9.7	3.48 (1.21)
b. encouragement of independent critical thinking?	27.3	30.3	24.2	18.2	0.0	3.67 (1.08)
c. satisfaction of applying knowledge to daily life situations?	21.2	45.5	21.2	9.1	3.0	3.73 (1.01)
d. application of scientific and historic method in research and thinking?	25.0	34.4	21.9	12.5	6.3	3.59 (1.19)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to achieve objectives?	12.1	33.3	42.4	9.1	3.0	3.42 (0.94)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	18.8	34.4	31.3	12.5	3.1	3.53 (1.05)
9. To what extent did learner's activities help develop the following attitudes:						
a. sound thinking?	27.3	42.4	18.2	12.1	0.0	3.85 (0.97)
b. interpretation?	18.8	28.1	34.4	15.6	3.1	3.44 (1.08)
c. rationalization?	18.2	24.2	36.4	21.2	0.0	3.39 (1.03)
d. analysis?	27.3	27.3	33.3	6.1	6.1	3.64 (1.14)
e. synthesizing?	25.0	21.9	34.4	9.4	9.4	3.44 (1.24)
f. forming opinions?	27.3	27.3	21.2	15.2	9.1	3.49 (1.30)
10. To what extent is the content of the Human Culture Curriculum in accordance with the cognitive development of the secondary level student?	21.2	39.4	30.3	3.0	6.1	3.67 (1.05)
11. To what degree is there integration between the Human Culture Curriculum for Grade II arts section with Grade III arts section?	18.2	18.2	27.3	21.2	15.2	3.03 (1.33)
12. To what extent did the Human Culture Curriculum for secondary level contribute to presenting a holistic (integrative) frame of Human Culture?	30.3	27.3	30.3	12.1	0.0	3.76 (1.03)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent was the Human Culture Curriculum at the secondary level successful in evaluating human ideas opinions, and thoughts by the standards of Islamic belief and values?	33.3	18.2	42.4	6.1	0.0	3.79 (0.99)
14. To what extent was the Human Culture Curriculum successful in encouraging initiativeness, question presentation and questioning in all intellectual situations?	30.3	27.3	30.3	9.1	3.0	3.73 (1.10)
15. To what extent was the Human Culture Curriculum successful in instilling in students an appreciation and respect for individual human differences?	21.2	30.3	42.4	3.0	3.0	3.64 (0.96)
16. To what extent did the Human Culture Curriculum for Class II Secondary arts section realize the following:						
a. formation of integration of different aspects of philosophy?	21.2	27.3	33.3	12.1	6.1	3.46 (1.15)
b. formation of a holistic outlook in life as perceived by eminent Western philosophers?	21.9	18.8	25.0	28.1	6.3	3.22 (1.26)
c. ascertain the creativeness of Islamic thought regardless of the effects of Greek philosophy?	39.4	39.4	9.1	9.1	3.0	4.03 (1.08)
d. appreciation of the importance of philosophy in the development of human thought?	24.2	30.3	36.4	9.1	0.0	3.70 (0.95)
e. instilling in students the first idea of the meaning of life, the human struggle with universal problems, and attempts at finding solutions to them?	24.2	36.4	27.3	9.1	3.0	3.70 (1.05)
f. identifying the basis for values derived from the Quran and the Prophet's tradition?	37.5	25.0	25.0	9.4	3.1	3.84 (1.14)
g. development and implementation of sound thinking, avoiding doubt and misgivings, and following the way that leads to the truth?	27.3	24.2	36.4	9.1	3.0	3.64 (1.08)
h. developing a sense of appreciation for sound thinking methodologies?	29.0	41.9	19.4	3.2	6.5	3.84 (1.10)
i. identifying some concepts and principles and specific research methodologies applied in some social sciences?	27.3	39.4	27.3	0.0	6.1	3.82 (1.04)
j. assuring the practice of the student of some particular skills such as data collection, reference work, footnoting, and sources?	43.8	18.8	18.8	12.5	6.3	3.81 (1.31)
k. instilling an appreciation of psychology in human life?	53.1	25.0	18.8	0.0	3.1	4.25 (0.98)
l. recognizing and criticizing some facts and principles that govern aspects of human behavior?	36.4	24.2	27.3	9.1	3.0	3.82 (1.13)
m. recognize and criticize new trends in the interpretation of human behavior?	30.3	36.4	21.2	12.1	0.0	3.85 (1.00)
n. recognization and criticism of modern approaches -- interpretation of human self and personality?	30.3	33.3	24.2	6.1	6.1	3.76 (1.15)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. To what extent did the Human Culture Curriculum for Class II Secondary Literary realize the following: (cont'd)						
o. identifying clearly the relationship between the psychlogy of human personality and its environment?	27.3	33.3	30.3	9.1	0.0	3.79 (0.96)
p. instilling appreciation of Islamic educators' contributions in educational psychology?	39.4	21.2	18.2	18.2	3.0	3.76 (1.25)
q. providing enjoyment to the student through reading and discussion of selected texts written by great Islamic and Western Scholars?	39.4	21.2	21.2	9.1	9.1	3.73 (1.33)
r. constructing mutual relationships among concepts present in the three units of the curriculum, namely the philosophy, logic, and psychology units?	24.2	42.4	12.1	9.1	12.1	3.58 (1.30)
s. presenting philosophical thoughts suitable to the intellectual level of a Grade 2 Secondary Level student?	16.1	41.9	22.6	16.1	3.2	3.52 (1.06)
t. introducing concepts in the logic unit suitable to the intellectual ability of the Grade 2 Secondary Level student?	36.4	27.3	21.2	6.1	9.1	3.76 (1.28)
u. presenting illustrative examples in the three units of curriculum?	21.2	30.3	24.2	12.1	12.1	3.36 (1.30)
17. To what extent do you feel that the content of the Human Culture Curriculum for Grade III Secondary arts section has illustrated the following:						
a. identify the causes of the Islamic people's in the 19th century and first half of the 20th century?	46.9	34.4	15.6	3.1	0.0	4.25 (0.84)
b. identifying the most important active factors in the formation of modern Arabic thought?	56.3	21.9	9.4	9.4	3.1	4.19 (1.15)
c. defining modern Arabic thought in the educational, scientific, and social aspects?	43.8	18.8	28.1	6.3	3.1	3.94 (1.13)
d. identifying contemporary Arab and Islamic leaders in the education, science, and social disciplines?	54.5	27.3	9.1	6.1	3.0	4.24 (1.06)
e. identifying Arab and Islamic intellectual scholars in the Sultanate of Oman?	48.5	24.2	9.1	12.1	6.1	3.97 (1.29)
f. comparing modern Arab thought with its counterpart in the 9th, and 10th century A.D.?	37.5	28.1	21.9	9.4	3.1	3.88 (1.13)
g. presenting texts and excerpts as means of enabling the students to deduct direction of contemporary Arab thought?	27.3	21.2	36.4	15.2	0.0	3.61 (1.06)
h. instilling an appreciation of intellectual efforts and struggle taken by eminent Arab-Muslim scholars?	42.4	24.2	24.2	9.1	0.0	4.00 (1.03)
i. optimistic view of the intellectual, scientific, and technological developments of Arabs in the future?	30.3	36.4	21.2	12.1	0.0	3.85 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response[a]					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent do you feel that the content of the Human Culture Curriculum for Grade III Secondary arts section has illustrated the following: (cont'd)						
j. avoiding pitfalls of suspicions, illusions, mysticism, generalization, blind imitation and adherence to sound principles of research, inquiry, and invention?	36.4	30.3	24.2	9.1	0.0	3.94 (1.00)
k. emphasizing integration among all Islamic Scholars even if their means differ?	36.4	33.3	24.2	6.1	0.0	4.00 (0.94)
l. ascertaining the emphasis of the diffusion of the ideas of the Islamic Scholars to all Islamic countries in contrast to diffusion within one country only?	45.5	27.3	15.2	12.1	0.0	4.06 (1.06)

[a] Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Islamic Education
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the contents of the Islamic Educational Curriculum?	0.0	0.0	0.0	66.7	33.3	1.67 (0.49)
2. To what extent are the number of weekly hours allocated for teaching the curriculum sufficient for realizing the desired objectives of the Islamic Education Curriculum?	0.0	8.3	0.0	33.3	58.3	1.58 (0.90)
3. To what extent does the Islamic Education Curriculum that you supervise emphasize the historical aspects of Islam?	0.0	0.0	33.3	25.0	41.7	1.92 (0.90)
4. To what extent does the Islamic Education Curriculum of the classes you supervise emphasize the philosophical aspects of Islam?	0.0	8.3	16.7	33.3	41.7	1.92 (1.00)
5. To what extent does the Islamic Education Curriculum encourage the students to participate in some of the extracurricular scholastic activities - such as the Religious Club and the Quranic recitation contests?	0.0	8.3	0.0	41.7	50.0	1.67 (0.89)
6 To what extent do teachers participate in the process of developing the Islamic Education Curriculum?	8.3	25.0	33.3	25.0	8.3	3.00 (1.13)
7. To what degree is there integration among the Islamic Education Curriculum in the Primary, Preparatory, and Secondary levels?	0.0	0.0	8.3	75.0	16.7	1.92 (0.52)
8. To what extent is integration realized between the Islamic Education Curriculum in Grades I, II, and III of the Secondary level?	0.0	0.0	18.2	72.7	9.1	2.09 (0.54)
9. To what extent is there integration, in the Omani Curricula, between Islamic Education and other subjects:						
a. Islamic Education and Arabic Language?	0.0	0.0	16.7	41.7	41.7	1.75 (0.75)
b. Islamic Education and Social Studies?	0.0	8.3	25.0	58.3	8.3	2.33 (0.78)
c. Islamic Education and Science?	8.3	8.3	58.3	25.0	0.0	3.00 (0.85)
d. Islamic Education and Mathematics?	16.7	16.7	58.3	8.3	0.0	3.42 (0.90)
e. Islamic Education and English Language?	58.3	8.3	33.3	0.0	0.0	4.25 (0.97)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent does the curriculum encourage students to understand that Islamic Education is not only an organized component of knowledge but also a method of thinking and behaving as well?	0.0	0.0	8.3	50.0	41.7	1.67 (0.65)
11. To what extent is the practical exercise of religious worship:						
a. an integral part of the Islamic Education Curriculum?	0.0	0.0	33.3	16.7	50.0	1.83 (0.94)
b. a basic component of the Islamic Educational method?	0.0	0.0	8.3	50.0	41.7	1.67 (0.65)
12. To what extent does the Islamic Education Curriculum encourage the students to develop basic attitudes and skills necessary for critical thinking, namely:						
a. not making hasty judgments?	0.0	8.3	0.0	58.3	33.3	1.83 (0.84)
b. testing the accuracy of information?	0.0	0.0	16.7	58.3	25.0	1.92 (0.67)
c. evaluating the sources of information?	8.3	0.0	8.3	66.7	16.7	2.17 (1.03)
d. utilizing varied sources of information?	8.3	0.0	33.3	41.7	16.7	2.42 (1.08)
13. To what extent does the Islamic Education Curriculum encourage students to develop basic attitudes and skills necessary for rational thinking, namely:						
a. Deductive Reasoning: applying general principles to special cases?	8.3	8.3	16.7	33.3	33.3	2.25 (1.29)
b. Inductive Reasoning: deriving a general principle or basis from special cases?	0.0	16.7	16.7	33.3	33.3	2.17 (1.12)
14. The contents of the Islamic Education Curriculum motivate the students to read additional Islamic references on their own?	8.3	8.3	8.3	33.3	41.7	2.08 (1.31)
15. The content of the Islamic Education Curriculum at the Secondary School level (Grades I through III) was designed as independent study encompassing the six components of Islamic Education. To what extent do you consider that the "Separate Lessons Method" leads to the realization of the desired integration within the components of Islamic Education as stipulated in the curriculum project?	0.0	9.1	18.2	54.5	18.2	2.18 (0.87)
16. To what extent do you agree that the Islamic Education Curriculum contributed to:						
a. reinforcing the awareness and active participation as a citizen of the nation?	0.0	0.0	16.7	58.3	25.0	1.92 (0.67)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. To what extent do you agree that the Islamic Education Curriculum contributed to: (con't)						
b. emphasizing that the Omani culture is based on Islamic culture?	0.0	0.0	16.7	50.0	33.3	1.83 (0.72)
17. To what extent did the Islamic Education Curricula contribute to the realization of the following:						
a. encountering the challenges of modern intellectual and cultural assimilation?	8.3	0.0	25.0	41.7	25.0	2.25 (1.14)
b. liberation of intellect from following foreign traditions and imitation phenomena?	0.0	0.0	41.7	25.0	33.3	2.08 (0.90)
c. creativity and innovation within the framework of Islamic thought?	8.3	8.3	25.0	41.7	16.7	2.50 (1.17)
18. To what extent were the developmental needs of secondary level students realized through the selection of Quranic Ayahs (Hadith) and Prophets Traditions?	0.0	8.3	25.0	33.3	33.3	2.08 (1.00)
19. To what extent did the Islamic Education Curricula contribute to establishing commitments to, and exercise of, functional Islamic rules?	0.0	0.0	16.7	33.3	50.0	1.67 (0.78)
20. To what extent did the Islamic Education Curricula contribute to the realization of the following:						
a. instilling the love of God Almighty in hearts?	0.0	0.0	0.0	25.0	75.0	1.25 (0.45)
b. instilling love of Prophet Muhammad and following his guidance?	0.0	0.0	0.0	25.0	75.0	1.25 (0.45)
c. instilling love for the Prophet's companions and following their guidance?	0.0	0.0	8.3	16.7	75.0	1.33 (0.65)
d. instilling pride in Islam?	0.0	0.0	8.3	25.0	66.7	1.42 (0.67)
21. To what extent did the Islamic Education Curriculum contribute to familiarizing the students with the following:						
a. social system in Islam?	0.0	8.3	0.0	33.3	58.3	1.58 (0.90)
b. political system in Islam?	0.0	0.0	8.3	33.3	58.3	1.50 (0.67)
c. economic system in Islam?	0.0	8.3	0.0	33.3	58.3	1.58 (0.90)
d. integrated educational system in Islam?	0.0	8.3	16.7	25.0	50.0	1.83 (1.03)
19. To what extent did the Islamic Education Curriculum succeed in utilizing the media, information, and examples which help achieve its objectives?	8.3	0.0	41.7	41.7	8.3	2.58 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Arabic Language
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the educational objectives of the Sultanate taken into consideration when setting the content of the Arabic Language Curriculum for the Secondary School Level?	37.5	37.5	25.0	0.0	0.0	4.13 (0.81)
2. To what degree do you think the units of the Arabic Language Curriculum contribute to the achievement of the objectives of Arabic Language at this level?	12.5	62.5	18.8	6.3	0.0	3.81 (0.75)
3. To what degree are the numbers of weekly hours allocated for teaching the Arabic Language at your grade level sufficient for the attainment of objectives at:						
a. Grade I Secondary?	25.0	56.3	12.5	0.0	6.3	3.94 (1.00)
b. Grade II Secondary?	31.3	56.3	0.0	12.5	0.0	4.06 (0.93)
c. Grade III Secondary?	31.3	56.3	6.3	6.3	0.0	4.13 (0.81)
4. To what extent does the Arabic Language Curriculum encourage and assist students to participate in extra-curricular activities such as contests, seminars, clubs, and exhibitions?	6.3	37.5	50.0	6.3	0.0	3.44 (0.73)
5. To what extent is there an integration between units of Arabic Language Curriculum at the Secondary Level and those in the Primary and Preparatory Curricula?	12.5	62.5	25.0	0.0	0.0	3.88 (0.62)
6. To what extent does the Arabic Language Curriculum for Secondary Level encourage the use of:						
a. modern educational media?	12.5	43.8	31.3	12.5	0.0	3.56 (0.89)
b. individual educational activities?	25.0	43.8	25.0	6.3	0.0	3.88 (0.89)
c. group educational activities?	13.3	53.3	20.0	13.3	0.0	3.67 (0.90)
7. To what extent is the content of the Arabic Language Curriculum at the Secondary Level flexible to allow the teacher to express his culture and experience and to give topics full coverage scientifically and culturally?	6.3	50.0	37.5	6.3	0.0	3.56 (0.73)
8. To what extent does the Arabic Language Curriculum help the students to achieve language skills in the following grades:						
a. Grade I Secondary?	12.5	62.5	25.0	0.0	0.0	3.88 (0.62)
b. Grade II Secondary?	0.0	75.0	25.0	0.0	0.0	3.75 (0.45)
c. Grade III Secondary?	18.8	56.3	25.0	0.0	0.0	3.94 (0.68)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Parely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
9. Some educators regard the function of the curriculum as not only educational, but also cultural and disciplinary. To what extent does this philosophy apply to the content of the Arabic Language Curriculum at Secondary Level?	25.0	50.0	25.0	0.0	0.0	4.00 (0.73)
10. To what extent does the academic curricular content of Arabic Language permit organization of the subject-matter structure sequentially, logically, and psychologically?	6.3	50.0	43.8	0.0	0.0	3.63 (0.62)
11. To what extent does the Arabic Language Curriculum allow for integrating current developments in the scientific and knowledge domains that are relevant to the content at this level in order to improve classroom learning?	6.3	56.3	31.3	6.3	0.0	3.63 (0.72)
12. To what extent does the content of the Arabic Language Curriculum inculcate different aspects such as: concepts, skills, interests, norms, attitudes, appreciation, and methods of thinking?	31.3	37.5	31.3	0.0	0.0	4.00 (0.82)
13. To what degree do you see that the content of the Arabic Language Curriculum in all its units is adequate in preparing Secondary level students for the following:						
a. university studies?	18.8	37.5	31.3	12.5	0.0	3.63 (0.96)
b. studying at higher institutes?	25.0	37.5	18.8	18.8	0.0	3.69 (1.08)
c. life situations?	12.5	31.3	50.0	6.3	0.0	3.50 (0.82)
14. To what extent did the authors of the Arabic Language Curriculum content show clearly the following:						
a. local environment?	25.0	56.3	18.8	0.0	0.0	4.06 (0.68)
b. national environment?	18.8	62.5	12.5	6.3	0.0	3.94 (0.77)
c. Islamic environment?	50.0	25.0	25.0	0.0	0.0	4.25 (0.86)
d. social environment?	37.5	31.3	25.0	0.0	6.3	3.94 (1.12)
15. To what extent did Arabic Language Curriculum designers consider the following:						
a. the past cultural heritage of the Sultanate of Oman?	31.3	62.5	0.0	6.3	0.0	4.19 (0.75)
b. modern Omani developments?	43.8	31.3	18.8	6.3	0.0	4.13 (0.96)
16. To what degree do you see that the curriculum content allowed for individual differences among students in:						
a. Grade I Secondary?	6.3	50.0	37.5	6.3	0.0	3.56 (0.73)
b. Grade II Secondary?	0.0	50.0	37.5	12.5	0.0	3.38 (0.72)
c. Grade III Secondary?	12.5	37.5	31.3	18.8	0.0	3.44 (0.96)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent do you agree on the soundness of the scientific aspect in the content of the Arabic Language Curriculum at the Secondary Level in the following areas:						
a. reading?	31.3	43.8	18.8	6.3	0.0	4.00 (0.89)
b. literary texts?	31.3	31.3	12.5	25.0	0.0	3.69 (1.20)
c. critique and eloquence?	31.3	37.5	12.5	18.8	0.0	3.81 (1.11)
d. history of literature?	31.3	18.8	31.3	12.5	6.3	3.56 (1.26)
e. grammar and inference?	37.5	37.5	12.5	12.5	0.0	4.00 (1.03)
f. poetic rhythm?	20.0	33.3	26.7	13.3	6.7	3.47 (1.19)
18. To what extent did the following Arabic Language Units contribute to providing Secondary Level students with analytical capabilities in each of the following:						
a. reading?	25.0	37.5	18.8	18.8	0.0	3.69 (1.08)
b. literary texts?	37.5	31.3	12.5	18.8	0.0	3.88 (1.15)
c. critique and eloquence?	25.0	43.8	12.5	18.8	0.0	3.75 (1.07)
d. history of literature?	12.5	37.5	18.8	25.0	6.3	3.25 (1.18)
e. grammar and inference?	31.3	37.5	12.5	18.8	0.0	3.81 (1.11)
f. poetic rhythm?	25.0	18.8	31.3	18.8	6.3	3.38 (1.26)
19. To what extent did reading topics in Secondary Level classes help develop the reading skills in the following ways:						
a. speed reading without making mistakes?	12.5	43.8	31.3	12.5	0.0	3.56 (0.89)
b. understanding of oral reading?	6.3	56.3	25.0	12.5	0.0	3.56 (0.81)
c. correct pronunciation?	18.8	31.3	31.3	18.8	0.0	3.50 (1.03)
d. appreciation and aesthetic perception of reading material?	6.3	43.8	31.3	18.8	0.0	3.38 (0.89)
e. ability to critique and to judge reading material?	6.3	31.3	31.3	18.8	12.5	3.00 (1.16)
20. To what extent is assessment of student achievement made in terms of success in meeting objectives specified by the curriculum in the following:						
a. application to students' developmental characteristics and needs?	31.3	31.3	31.3	6.3	0.0	3.88 (0.96)
b. suitability to the students' abilities and capabilities?	25.0	43.8	25.0	6.3	0.0	3.88 (0.89)
c. relation to students' experience in their daily lives?	18.8	18.8	56.3	6.3	0.0	3.50 (0.89)
d. related to the students' daily lives?	25.0	37.5	37.5	0.0	0.0	3.88 (0.81)
e. variety in topics and scope?	18.8	62.5	18.8	0.0	0.0	4.00 (0.63)
f. realization of students' functional level?	12.5	31.3	50.0	6.3	0.0	3.50 (0.82)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
21. To what extent was horizontal integration and continuity realized among curriculum topics of Arabic Language in the following classes:						
a. Grade I Secondary?	12.5	56.3	25.0	6.3	0.0	3.75 (0.78)
b. Grade II Secondary?	12.5	56.3	25.0	6.3	0.0	3.75 (0.78)
c. Grade III Secondary?	18.8	56.3	12.5	12.5	0.0	3.81 (0.91)
22. To what extent was vertical integration and continuity achieved among curriculum units of Arabic Language in the three class levels:						
a. Grade I Secondary?	18.8	68.8	12.5	0.0	0.0	4.06 (0.57)
b. Grade II Secondary?	18.8	68.8	12.5	0.0	0.0	4.06 (0.57)
c. Grade III Secondary?	25.0	62.5	12.5	0.0	0.0	4.13 (0.62)
23. To what extent were the following taken into consideration in selecting curriculum content in Arabic Language at the Secondary Level:						
a. logical scope and sequence in quantity?	18.8	43.8	37.5	0.0	0.0	3.81 (0.75)
b. logical scope and sequence in quality?	31.3	25.0	31.3	12.5	0.0	3.75 (1.07)
24. To what extent were the readings for Secondary Level classes varied and covered all aspects and domains necessary for the student's cultural, religious, social, and economic growth?	37.5	37.5	25.0	0.0	0.0	4.13 (0.81)
25. To what extent were the following criteria considered in selecting reading topics in Secondary Level classes:						
a. hierarchical gradation in quantity of topics for Grade III?	25.0	43.8	31.3	0.0	0.0	3.94 (0.77)
b. hierarchical gradation in quality of topics for Grade III?	12.5	37.5	37.5	12.5	0.0	3.50 (0.89)
c. relevance to contemporary spirit and modern technological progress?	20.0	46.7	33.3	0.0	0.0	3.87 (0.74)
d. inculcation of topics that represent the originality and culture of the past?	43.8	43.8	12.5	0.0	0.0	4.31 (0.70)
26. To what extent did the Arabic Language Curriculum content in different units help:						
a. motivate students to read independently?	12.5	31.3	56.3	0.0	0.0	3.56 (0.73)
b. enrich students' vocabulary?	6.3	62.5	25.0	6.3	0.0	3.69 (0.70)
c. enhance the students' culture and expand their perceptions?	6.3	68.8	25.0	0.0	0.0	3.81 (0.54)
d. students' acquisition of skill in oral and written expression?	6.3	62.5	25.0	6.3	0.0	3.69 (0.70)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
26. To what extent did the Arabic Language Curriculum content in different units help: (cont'd)						
e. create social situations to teach language?	18.8	43.8	31.3	6.3	0.0	3.75 (0.86)
f. stimulate the motivation to learn in students?	0.0	62.5	31.3	6.3	0.0	3.56 (0.63)
27. To what extent is the balance between prose and poetry texts realized in setting content of the curriculum in the following classes?						
a. Grade I Secondary?	25.0	56.3	12.5	6.3	0.0	4.00 (0.82)
b. Grade II Secondary?	37.5	50.0	12.5	0.0	0.0	4.25 (0.68)
c. Grade III Secondary?	31.3	43.8	25.0	0.0	0.0	4.06 (0.77)
28. To what degree do the selected literary texts in the three secondary level classes help develop the skills of literary oriented students and encourage them to practice these skills?	6.3	50.0	37.5	6.3	0.0	3.56 (0.73)
29. To what extent do you see that the selected literary texts contribute to:						
a. development of appreciation?	12.5	43.8	25.0	18.8	0.0	3.50 (0.97)
b. development of imagination to stimulate visualization and creativity?	6.3	37.5	37.5	12.5	6.3	3.25 (1.00)
c. acquiring self-enjoyment?	12.5	43.8	18.8	18.8	6.3	3.38 (1.15)
d. development of abilities to critique, balance, and make literary judgments?	6.3	37.5	43.8	0.0	12.5	3.25 (1.07)
30. To what degree do you see the content of the literary text curriculum appropriate in quantity and quality to students' level in the following classes:						
a. Grade I Secondary?	25.0	37.5	12.5	18.8	6.3	3.56 (1.26)
b. Grade II Secondary?	12.5	56.3	18.8	12.5	0.0	3.69 (0.87)
c. Grade III Secondary?	25.0	43.8	12.5	18.8	0.0	3.75 (1.07)
31. To what degree do you feel the content of the literary text curriculum is good as to the:						
a. distribution of the terms and topics among the three classes?	18.8	37.5	18.8	25.0	0.0	3.50 (1.10)
b. diversity of topics and literature in the three classes?	18.8	43.8	31.3	6.3	0.0	3.75 (0.86)
32. To what extent was representation of Omani culture and literature achieved when selecting content of literary texts in the following classes:						
a. Grade I Secondary?	12.5	56.3	12.5	18.8	0.0	3.63 (0.96)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
32. To what extent was representation of the Omani culture and literature achieved when selecting content of literary texts in the following classes: (cont'd)						
b. Grade II Secondary?	0.0	62.5	18.8	18.8	0.0	3.44 (0.81)
c. Grade III Secondary?	12.5	43.8	31.3	12.5	0.0	3.56 (0.89)
33. To what extent was representation of Omani environment and literature realized in the curriculum content in the following language branches?						
a. reading?	18.8	56.3	18.8	6.3	0.0	3.89 (0.81)
b. literary texts?	6.3	43.8	31.3	12.5	6.3	3.31 (1.01)
c. critique and eloquence?	6.3	43.8	18.8	18.8	12.5	3.13 (1.20)
d. history of literature?	12.5	43.8	31.3	6.3	6.3	3.50 (1.03)
e. grammar and inference?	6.3	25.0	31.3	18.8	18.8	2.81 (1.22)
34. To what extent was balance among different literary periods realized when selecting content of literary text in the Secondary Level?	25.0	50.0	18.8	6.3	0.0	3.94 (0.85)
35. To what degree do you perceive that the amount of literary texts in each class sufficient to differentiate between:						
a. thought characteristics of the periods it represents?	12.5	43.8	37.5	6.3	0.0	3.63 (0.81)
b. artistic characteristics of the periods it represents?	12.5	43.8	37.5	6.3	0.0	3.63 (0.81)
36. To what extent was the functional aspect of the language realized, and selected literary texts benefited from the students' daily life situations?	6.3	50.0	31.3	6.3	6.3	3.44 (0.96)
37. To what degree do you feel that the selected literary texts are appropriate for students' language skills and standards in the following classes:						
a. Grade I Secondary?	25.0	6.3	56.3	6.3	6.3	3.38 (1.15)
b. Grade II Secondary?	6.3	62.5	25.0	6.3	0.0	3.69 (0.70)
c. Grade III Secondary?	37.5	25.0	31.3	6.3	0.0	3.94 (1.00)
38. To what degree do you see that the content of the grammar and inference curriculum realizes the desired language skills in the following classes:						
a. Grade I Secondary?	0.0	50.0	43.8	0.0	6.3	3.38 (0.81)
b. Grade II Secondary?	12.5	43.8	43.8	0.0	0.0	3.69 (0.70)
c. Grade III Secondary?	12.5	37.5	37.5	12.5	0.0	3.50 (0.89)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
39. To what degree do you agree that the content of grammar and inference should include several pages from the dictionary of etymology "Muj'am Al ma'ni" so that it contributes in the development of linguistic inference with Grade III Secondary students?	31.3	31.3	18.8	6.3	12.5	3.63 (1.36)
40. To what degree do you agree that the content of inflection and grammar curriculum in Secondary Level units be organized in a system inculcating similarities and isotopes appropriate to the standards of students at this level?	31.3	43.8	6.3	6.3	12.5	3.75 (1.34)
41. To what degree do you feel the following topics should be excluded from the content of grammar curriculum:						
a. sentences that cannot be parsed?	37.5	6.3	6.3	18.8	31.3	3.00 (1.79)
b. sentences that can be parsed?	12.5	18.8	12.5	18.8	37.5	2.50 (1.51)
c. meanings of some letters (harf)?	12.5	18.8	18.8	0.0	50.0	2.44 (1.59)
d. modulating?	6.3	18.8	12.5	12.5	50.0	2.19 (1.42)
e. nominative pronoun?	18.8	12.5	18.8	18.8	31.3	2.69 (1.54)
f. separating pronoun?	13.3	26.7	20.0	13.3	26.7	2.87 (1.46)
g. conjunctive and disjunctive "hamza"?	12.5	18.8	12.5	6.3	50.0	2.38 (1.59)
42. To what degree do you agree on increasing definitions and categorization in the following eloquence topics:						
a. similarizing?	31.3	25.0	6.3	25.0	12.5	3.38 (1.50)
b. exclamations for eloquence purposes?	37.5	18.8	6.3	25.0	12.5	3.44 (1.55)
c forwarding?	18.8	31.3	18.8	25.0	6.3	3.31 (1.25)
d. omitting?	18.8	25.0	25.0	18.8	12.5	3.19 (1.33)
43. To what extent do you feel that the content of the Critique Curriculum in Grades I and III help to differentiate between:						
a. characteristics of poetic arts?	25.0	37.5	31.3	6.3	0.0	3.81 (0.91)
b. characteristics of prose arts?	25.0	43.8	25.0	6.3	0.0	3.88 (0.89)
c. characteristics of different literary schools?	25.0	37.5	31.3	6.3	0.0	3.81 (0.91)
44. Some educations believe that content of the present eloquence ("Balagha") curriculum as it is presented in the Secondary Level leads to its standstill and confinement in frames, terms and categories, which define its separation from literary studies and departs from its real scope and function. To what degree do you agree with this opinion?	12.5	18.8	56.3	0.0	12.5	3.19 (1.11)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
45. To what extent was the content of Critique and Eloquence (" Balagha") in Secondary Level attached to modern literature as it is closer to the student's contemporary life and immediate experience?	6.3	25.0	50.0	18.8	0.0	3.19 (0.83)
46. To what degree do you see that the Critique and Eloquence curriculum emphasized a general abstraction that stimulates the intellect of the student?	12.5	12.5	56.3	12.5	6.3	3.13 (1.03)
47. To what degree do you agree that study of Critique and Eloquence in Grade I be deleted, although students in this grade need these skills while in studying, analyzing, and critiquing literary texts?	18.8	18.8	31.3	6.3	25.0	3.00 (1.46)
48. To what degree do you feel that the content of poetic rhythm "Urud" in grades II and III (literary) are adequate to realize the objectives of the curriculum?	31.3	25.0	31.3	12.5	0.0	3.75 (1.07)
49. To what extent do you agree with deleting of poetic rhythm "Urud" from Grades II and III in the scientific section?	43.8	12.5	12.5	12.5	18.8	3.50 (1.63)
50. To what extent do you feel that students benefit from the literary section in Grades II and III from studying poetic rhythms course "Urdu"?	37.5	18.8	18.8	25.0	0.0	3.69 (1.25)
51. To what degree is the content of the Critique and Eloquence Curriculum appropriate for linguistic and intellectual levels for students at this level?	12.5	43.8	37.5	6.3	0.0	3.63 (0.81)
52. To what degree are the topics of the History of Literature in Grade III Secondary in vertically integrated and coordinated with those in Grade II Secondary?	18.8	31.3	25.0	25.0	0.0	3.44 (1.09)
53. To what degree do you feel that the curriculum content of the History of Literature has a logical gradation in construction and sequence?	31.3	25.0	25.0	18.8	0.0	3.69 (1.14)
54. To what degree is the selected content of the History of Literature through different time periods adequate in giving a clear vision of:						
a. development of literature across different periods?	25.0	37.5	25.0	12.5	0.0	3.75 (1.00)
b. literary phenomena in connected periods?	25.0	25.0	37.5	12.5	0.0	3.63 (1.03)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
54. To what degree is the selected content of the History of Literature through different time periods adequate in giving a clear vision of: (cont'd)						
c. intellectual and artistic characteristics in periods of study?	25.0	25.0	25.0	25.0	0.0	3.50 (1.16)
55. To what degree do you feel the content of the History of Literature and Literary Autobiography at the Secondary Level are sufficient for:						
a. enriching students' perceptions and outlook on life?	18.8	37.5	37.5	6.3	0.0	3.69 (0.87)
b. students' understanding of life and interpretation of its events?	20.0	20.0	53.3	6.7	0.0	3.53 (0.92)
56. To what extent do you agree that the content of the History of Literature Curriculum has encompassed all literary phenomena in the different periods being studied?	25.0	25.0	37.5	12.5	0.0	3.63 (1.03)
57. To what degree has the curriculum content of the History of Literature - prose and poetry - achieved balance in selected topics so that the studies give sound judgment on the history of literature in different periods?	31.3	25.0	37.5	6.3	0.0	3.81 (0.98)
58. To what degree do you feel the present content distribution of the History of Literature Curriculum should be deleted from Grade I Secondary?	25.0	12.5	18.8	18.8	25.0	2.94 (1.57)
59. To what extent do you feel the Literary Autobiographies Curriculum contributes to leading students to famous literary characters in present day world of literature?	18.8	50.0	12.5	12.5	6.3	3.63 (1.15)
60. To what degree do you perceive that Literary Autobiographies Curriculum draws a clear illustration of:						
a. status of the autobiographer among his literary contemporaries?	31.3	50.0	0.0	18.8	0.0	3.94 (1.06)
b. his artistic and intellectual characteristics?	25.0	50.0	18.8	6.3	0.0	3.94 (0.85)
61. To what degree do you see that the History of Literature and Literary Autobiographies Curriculum contribute to the students' use of literary resources and references?	12.5	62.5	6.3	18.8	0.0	3.69 (0.95)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
English Language Curriculum Content
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term goals taken into consideration when setting the criteria for selecting and organizing the contents of the English Language Curriculum?	0.0	50.0	27.8	16.7	5.6	3.22 (0.94)
2. To what extent are the number of periods allocated for teaching the English Language Curriculum sufficient to realize the desired goals for the following:						
a. the 1S level students (6 periods per week)?	0.0	47.4	31.6	21.1	0.0	3.26 (0.81)
b. the 2S and 3S Arts students (8 periods per week)?	10.5	42.1	42.1	5.3	0.0	3.58 (0.77)
c. the 2S and 3S Science students (6 periods per week)?	5.3	47.4	31.6	15.8	0.0	3.42 (0.84)
3. To what extent does the content of the English Language Curriculum that you teach reflect an Omani cultural orientation?	10.5	15.8	57.9	15.8	0.0	3.21 (0.86)
4. To what degree does the English Language Curriculum of the classes you teach encourage the students to engage in extracurricular activities, e.g., clubs and contests?	0.0	10.5	36.8	42.1	10.5	2.47 (0.84)
5. To what extent is there integration of the English Language Curriculum in the Primary, Preparatory, and Secondary Schools?	5.3	52.6	21.1	21.1	0.0	3.42 (0.90)
6. To what extent is there integration of the English Language Curriculum and the other subjects' curricula:						
a. English and Islamic Studies?	0.0	0.0	11.8	29.4	58.8	1.53 (0.72)
b. English and Arabic Language?	0.0	0.0	11.8	35.3	52.9	1.59 (0.71)
c. English and Mathematics?	5.9	0.0	23.5	52.9	17.6	2.24 (0.97)
d. English and Science?	5.9	17.6	52.9	17.6	5.9	3.00 (0.94)
e. English and Social Studies?	0.0	11.8	47.1	23.5	17.6	2.53 (0.94)
7. To what extent is English Language remediation required for Omani secondary students?	15.8	52.6	15.8	15.8	0.0	3.68 (0.95)
8. The Secondary English Language Curriculum of 2S and 3S students is designed for both the Arts and Science groups. To what extent do the core materials reflect the interest of:						
a. the Arts groups?	0.0	35.3	52.9	11.8	0.0	3.24 (0.66)
b. the Science groups?	0.0	52.6	42.1	5.3	0.0	3.47 (0.61)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
9. To what extent does the English Language Curriculum content encourage the students to think creatively and to be independent thinkers?	0.0	15.8	47.4	26.3	10.5	2.68 (0.89)
10. To what extent does the English Language Curriculum encourage the students to develop the basic skills necessary for rational thought - namely:						
a. deductive reasoning: applying general principles to special cases?	0.0	26.3	42.1	31.6	0.0	2.95 (0.78)
b. inductive reasoning: deriving a general principle or basis from special cases?	0.0	27.8	38.9	33.3	0.0	2.94 (0.80)
11. To what extent is the English Language Curriculum flexible enough to permit all English Language teachers to input their individual cultural experiences?	0.0	15.8	31.6	31.6	21.1	2.42 (1.02)
12. To what degree is the vocabulary introduced at each grade of the Secondary Level of the English Language Curriculum:						
a. quantitatively sufficient to attain the goals of the English Language Curriculum?	10.5	47.4	42.1	0.0	0.0	3.68 (0.67)
b. too difficult for the students' cultural and cognitive level?	10.5	10.5	36.8	36.8	5.3	2.84 (1.07)
13. To what extent does the English Language Curriculum content cover specialized vocabulary and topics from a multitude of language domains to enable the student to communicate effectively in respect to:						
a. the personal domain?	5.3	57.9	26.3	5.3	5.3	3.53 (0.91)
b. the social domain?	5.3	31.6	36.8	26.3	0.0	3.16 (0.90)
c. the national domain?	0.0	21.1	52.6	26.3	0.0	2.95 (0.71)
d. the international domain?	0.0	26.3	42.1	31.6	0.0	2.95 (0.78)
e. the scientific domain?	0.0	33.3	55.6	5.6	5.6	3.17 (0.79)
f. the literary and cultural domain?	0.0	16.7	38.9	33.3	11.1	2.61 (0.92)
g. the geo-political domain?	0.0	0.0	22.2	55.6	22.2	2.00 (0.69)
14. To what extent is "formal grammar" covered in the Secondary English Language Curriculum?	0.0	11.1	27.8	38.9	22.2	2.28 (0.96)
15. To what extent do you think that "formal grammar" should be covered in the Secondary English Language Curriculum?	0.0	33.3	55.6	11.1	0.0	3.22 (0.65)
16. To what extent is the grammar introduced at the Secondary Level of the English Language Curriculum:						
a. mechanistic?	10.5	31.6	26.3	21.1	10.5	3.11 (1.20)
b. thought provoking?	0.0	5.6	61.1	27.8	5.6	2.67 (0.69)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent does the workbook "Writing Tasks" help the English language students to develop useful writing skills?	5.3	10.5	42.1	31.6	10.5	2.68 (1.00)
18. To what extent are English Language class cassettes useful to teachers and students in:						
a. providing good pronunciation models?	36.8	36.8	10.5	15.8	0.0	3.95 (1.08)
b. promoting and practicing listening comprehension?	31.6	42.1	15.8	10.5	0.0	3.95 (0.97)
c. presenting difficult materials such as dialogues and songs?	31.6	36.8	15.8	10.5	5.3	3.79 (1.18)
19. To what extent are the students encouraged to borrow or make their own copies of the English Language class cassettes so that they may practice on their own at home?	0.0	5.3	15.8	52.6	26.3	2.00 (0.82)
20. To what extent do the English Language class cassettes present problems, in that the listening passages:						
a. are too long?	5.3	10.5	57.9	15.8	10.5	2.84 (0.96)
b. are spoken too rapidly?	0.0	31.6	47.4	10.5	10.5	3.00 (0.94)
c. are too complex?	5.3	26.3	21.1	31.6	15.8	2.74 (1.20)
d. present an unsuitable topic?	0.0	10.5	26.3	47.4	15.8	2.32 (0.89)
e. must be played more than twice before there is any comprehension?	11.1	22.2	33.3	22.2	11.1	3.00 (1.19)
21. To what extent are films and videos used in achieving the goals of the English Language Curriculum?	5.3	15.8	21.1	26.3	31.6	2.37 (1.26)
22. To what extent are the English Language study texts useful in:						
a. improving the student's silent reading speed and comprehension?	0.0	52.6	42.1	5.3	0.0	3.47 (0.61)
b. providing contextual examples of new structural and functional language?	0.0	47.4	42.1	10.5	0.0	3.37 (0.68)
c. increasing the student's vocabulary?	5.3	57.9	26.3	10.5	0.0	3.58 (0.77)
d. offering materials for listening and discussion as well as controlled oral and written work?	0.0	42.1	36.8	21.1	0.0	3.21 (0.79)
23. To what extent are the "Reading for Information Texts" in the English Language Curriculum useful in:						
a. simulating articles and stories from newspapers or magazines?	0.0	33.3	55.6	11.1	0.0	3.22 (0.65)
b. encouraging student's rapid silent reading of quite difficult texts for extracting the main points and factual information?	5.3	42.1	26.3	26.3	0.0	3.26 (0.93)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
24. To what extent are the "Check Your Understanding" exercises in the English Language Curriculum useful for checking the student's understanding of the Serial Story?	10.5	36.8	47.4	5.3	0.0	3.53 (0.77)
25. To what extent are the "Reading Passages" in the Secondary English Language Curriculum sufficiently authentic and up-to-date?	11.1	38.9	44.4	5.6	0.0	3.56 (0.78)
26. To what extent are the "Reading for Pleasure" passages at the secondary level of the English Language Curriculum as effective in "inducing pleasurable reading"?	10.5	26.3	57.9	0.0	5.3	3.37 (0.90)
27. To what extent is the English Language Curriculum component "Paul's Tall Stories" understood by and beneficial to Omani students?	0.0	21.1	36.8	21.1	21.1	2.58 (1.07)
28. To what extent is it desirable "to chunk":						
a. listening passages?	15.8	36.8	31.6	15.8	0.0	3.53 (0.96)
b. reading passages?	10.5	36.8	36.8	15.8	0.0	3.42 (0.90)
29. To what extent do the "Tasks" (as suggested in the teacher's manuals and student's books of the English Language Curriculum) lead to better understanding of the "Reading Passages" by the students?	5.3	31.6	52.6	10.5	0.0	3.32 (0.75)
30. To what extent is the "anaphoric reference" a useful technique to:						
a. teach reading?	0.0	63.2	36.8	0.0	0.0	3.63 (0.50)
b. test reading?	5.6	44.4	50.0	0.0	0.0	3.56 (0.62)
31. To what extent is the "cloze" methodology effective in the English Language Curriculum as:						
a. cloze passages for teaching?	5.6	50.0	27.8	16.7	0.0	3.44 (0.86)
b. cloze tests?	11.1	50.0	27.8	5.6	5.6	3.56 (0.98)
32. To what extent does the Secondary English Language Curriculum provide students with sufficient basic competence to be able to use English in their lives and work as the need arises:						
a. in reading?	0.0	42.1	47.4	10.5	0.0	3.32 (0.67)
b. in writing?	0.0	15.8	47.4	31.6	5.3	2.74 (0.81)
c. in listening?	0.0	36.8	57.9	5.3	0.0	3.32 (0.58)
d. in speaking?	5.3	36.8	31.6	21.1	5.3	3.16 (1.02)
e. in comprehension?	0.0	47.4	42.1	10.5	0.0	3.37 (0.68)
33. To what extent are the various skill areas integrated in the Secondary English Language Curriculum?	5.6	38.9	50.0	5.6	0.0	3.44 (0.71)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
34. To what extent does the English Language Curriculum content enable the students to master the following skills:						
a. understand continuous speech of three minutes duratin at a near native-speaker speed of delivery on a familiar topic?	0.0	26.3	52.6	10.5	10.5	2.95 (0.91)
b. follow the logical sequences of an argument on a common topic?	0.0	21.1	63.2	10.5	5.3	3.00 (0.75)
c. comprehend telephone conversations making arrangements or requesting information?	5.3	31.6	47.4	15.8	0.0	3.26 (0.81)
d. folllow the main points of an English language news broadcast on local television?	0.0	15.8	42.1	42.1	0.0	2.74 (0.73)
e. interrupt and ask questions during a short lecture or informal talk?	0.0	15.8	21.1	47.4	15.8	2.37 (0.96)
f. agree or disagree with a fluent speaker in an informal situation?	0.0	5.3	31.6	47.4	15.8	2.26 (0.81)
g. express facts and opinions in a clear, logical sequence?	0.0	21.1	21.1	52.6	5.3	2.58 (0.90)
h. summarize materials read at the level of the English Language course book?	0.0	5.3	68.4	15.8	10.5	2.68 (0.75)
i. converse with a fluent speaker on topics relating to his/her experience?	0.0	21.1	42.1	26.3	10.5	2.74 (0.93)
j. skim extended texts and extract important and relevant information?	0.0	31.6	47.4	21.1	0.0	3.11 (0.74)
k. distinquish fact from opinion?	0.0	16.7	50.0	22.2	11.1	2.72 (0.90)
l. deduce the meaning of a passage in which only 80% of the vocabulary is familiar?	5.3	21.1	52.6	15.8	5.3	3.05 (0.91)
m. read handwritten social and business letters?	0.0	21.1	26.3	42.1	10.5	2.58 (0.96)
n. read and understand telexes?	0.0	21.1	15.8	47.4	15.8	2.42 (1.02)
o. read and understand instruction manuals, such as car manuals or hair dryer leaflets?	0.0	21.1	26.3	42.1	10.5	2.58 (0.96)
p. read timetables, tourist information, and simple street maps?	5.3	42.1	31.6	15.8	5.3	3.26 (0.99)
q. read the daily newspaper with comprehension?	0.0	21.1	31.6	36.8	10.5	2.63 (0.96)
r. write short social or business letters in the appropriate tone and form?	0.0	10.5	57.9	21.1	10.5	2.68 (0.82)
s. write logically coherent narrative prose of 200 to 300 words?	0.0	15.8	21.1	36.8	26.3	2.26 (1.05)
t. write instructions and short reports?	0.0	15.8	36.8	42.1	5.3	2.63 (0.83)
u. summarize the main points of a talk or written text at grade level?	0.0	15.8	36.8	42.1	5.3	2.63 (0.83)
v. develop library skills to locate books, look up words in a dictionary, and extract relevant information from a reference book?	5.6	22.2	27.8	27.8	16.7	2.72 (1.18)
w. read for enjoyment a novel appropriate to the grade level of the student?	0.0	38.9	38.9	16.7	5.6	3.11 (0.90)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
35. To what extent does the Secondary English Language Curriculum prepare students for life after school to:						
a. study at Sultan Qaboos University or universities abroad?	0.0	16.7	50.0	27.8	5.6	2.78 (0.81)
b. obtain jobs in the Omani national private sector?	5.3	10.5	63.2	21.1	0.0	3.00 (0.75)
c. obtain jobs in the Omani government sector?	5.3	21.1	63.2	10.5	0.0	3.21 (0.71)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Mathematics Curriculum Content
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term objectives taken into consideration when setting the criteria for selecting and organizing the contents of the Secondary Mathematics Curriculum?	0.0	66.7	33.3	0.0	0.0	3.67 (0.50)
2. To what extent are the number of weekly hours allocated for teaching curriculum sufficient for realizing the desired goals of the Mathematics Curriculum?	0.0	88.9	11.1	0.0	0.0	3.89 (0.33)
3. To what extent does the Mathematics Curriculum encourage students to participate in extracurricular activities such as clubs, contests, and science fairs?	0.0	33.3	44.4	22.2	0.0	3.11 (0.78)
4. To what extent is there vertical integration of the Mathematics Curriculum content in the Primary, Preparatory, and Secondary Levels?	11.1	66.7	11.1	11.1	0.0	3.78 (0.83)
5. To what extent is there integration and continuity of the Mathematics Curriculum in the Primary, Preparatory, and Secondary Levels?	11.1	66.7	11.1	11.1	0.0	3.78 (0.83)
6. To what extent is there integration of the Mathematics Curriculum and other subjects' curricula of the same level?	0.0	44.4	44.4	11.1	0.0	3.33 (0.71)
7. To what extent does the Mathematics subject-matter help students develop the attitudes and habits essential for logical thinking:						
a. Inductive reasoning: integrating rules governing special cases and problems to arrive at a general rule?	22.2	77.8	0.0	0.0	0.0	4.22 (0.44)
b. Deductive reasoning: applying general principles to a specific situation or case?	22.2	66.7	0.0	0.0	11.1	3.89 (1.17)
8. To what extent does the Mathematics Curriculum encourage the students to develop attitudes and basic skills necessary for critical thinking:						
a. suspending judgement?	22.2	66.7	0.0	0.0	11.1	3.89 (1.17)
b. testing the accuracy of data?	11.1	77.8	0.0	0.0	11.1	3.78 (1.09)
c. evaluating sources of data?	11.1	66.7	11.1	11.1	0.0	3.78 (0.83)
d. utilizing various sources of information?	11.1	55.6	11.1	11.1	11.1	3.44 (1.24)
9. To what extent does the Mathematics Curriculum at the Secondary Level use different instructional media?	11.1	22.2	44.4	11.1	11.1	3.11 (1.17)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent does the curriculum allow the students to perform different activities in order to strengthen mathematical concepts?	11.1	55.6	11.1	11.1	11.1	3.44 (1.24)
11. To what extent did the curriculum allow you to benefit from feedback?	0.0	44.4	44.4	11.1	0.0	3.33 (0.71)
Mathematical Construction						
12. To what degree do you feel that evaluation measurements for different units of Mathematics at the Secondary Level were appropriate?	0.0	55.6	44.4	0.0	0.0	3.56 (0.53)
13. To what extent did the Mathematics Curriculum at the Secondary Level contribute to student's acquisition of different points of view that would make him able to:						
a. deduce generalizations and re-confirm the soundness of his deductions?	11.1	44.4	11.1	22.2	11.1	3.22 (1.30)
b. integrate concepts included in the generalizations?	11.1	22.2	33.3	22.2	11.1	3.00 (1.23)
14. To what extent did the Mathematics Curriculum at the Secondary Level emphasize the student's understanding of logarithms before stressing the required skill?	11.1	44.4	44.4	0.0	0.0	3.67 (0.71)
15. To what extent did the Secondary Mathematics Curriculum consider acquisition of skills related to:						
a. interpretation of charts and graphs?	11.1	66.7	11.1	11.1	0.0	3.78 (0.83)
b. skills of drawing operations flow charts?	11.1	44.4	33.3	11.1	0.0	3.56 (0.88)
Mathematical Procedures						
16. To what extent did the Secondary Mathematics Curriculum consider principles of logic in deducing mathematical theories in the three grades?	11.1	55.6	33.3	0.0	0.0	3.78 (0.67)
17. To what extent does the Secondary Mathematics Curriculum consider inductive procedures in students' acquisition of mathematical knowledge?	11.1	44.4	44.4	0.0	0.0	3.67 (0.71)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Learning and Teaching Mathematics						
18. To what extent did the curriculum contribute to the realization of self-learning principles through:						
a. encouragement of presenting cases which student analyzes and arrives generalizations by himself?	11.1	55.6	33.3	0.0	0.0	3.78 (0.67)
b. encouragement of the extra-curricular mathematics activities?	0.0	11.1	55.6	33.3	0.0	2.78 (0.67)
c. develop desire to continue studying mathematics?	0.0	33.3	33.3	22.2	11.1	2.89 (1.05)
19. To what extent does Secondary Mathematics Curriculum allow employment of mathematical information in the student's daily life so as to provide the motivation for further learning?	0.0	33.3	33.3	11.1	22.2	2.78 (1.20)
Mathematical Usages						
18. To what extent did the Secondary Mathematics Curriculum encourage students to study mathematics and develop positive attitudes towards:						
a. continuation of mathematical studies?	0.0	44.4	22.2	11.1	22.2	2.89 (1.27)
b. use in daily problem solving?	0.0	25.0	50.0	12.5	12.5	2.88 (0.99)
c. assist in understanding other fields of knowledge?	0.0	25.0	62.5	0.0	12.5	3.00 (0.93)
The Omani Secondary Level Mathematics Curriculum consists of several units for each grade as follows:						
Grade 1 Secondary						
21. To what extent does the time schedule (6 weekly hours) accommodate the curriculum content of Grade 1 Secondary?	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
22. To what extent could the Logic Unit in Mathematics be considered appropriate for Grade 1 Secondary from the following aspects:						
a. concepts, terminologies, and symbolization?	11.1	44.4	33.3	0.0	11.1	3.44 (1.13)
b. generalizations?	22.2	22.2	44.4	0.0	11.1	3.44 (1.24)
c. algorithms and skills?	11.1	44.4	33.3	0.0	11.1	3.44 (1.13)
d. exercises and applications?	22.2	33.3	22.2	11.1	11.1	3.44 (1.33)
23. To what extent is there cohesion between units of "correlations and functions" and material previously studied in the Preparatory Level?	11.1	77.8	11.1	0.0	0.0	4.00 (0.50)
24. To what degree do you feel you need Algebra of sets in teaching Secondary Grade 1 curriculum so that they can be employed in the unit of probability?	22.2	55.6	22.2	0.0	0.0	4.00 (0.71)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
25. To what degree were student's responses to the curriculum's demonstrations of each of the following:						
a. non-congrency (inequality) relations?	11.1	22.2	33.3	22.2	11.1	3.00 (1.23)
b. congrency relations?	22.2	44.4	11.1	22.2	0.0	3.67 (1.12)
c. part-sequential relations?	11.1	44.4	11.1	33.3	0.0	3.33 (1.12)
d. full sequential relations?	11.1	44.4	11.1	33.3	0.0	3.33 (1.12)
26. To what degree do you consider the importance of the following being included in the curriculum:						
a. partition?	22.2	33.3	33.3	0.0	11.1	3.56 (1.24)
b. classes of equivalence?	22.2	33.3	33.3	0.0	11.1	3.56 (1.24)
27. To what extent did the Secondary Grade 1 Mathematics Curriculum contribute to students' acquisition of accuracy in applying the algorithms to transfer from one number systems to another?	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
28. To what degree do you feel that solid geometry in Grade 1 Secondary is sufficient to make the student capable of visualizing forms in space?	12.5	37.5	37.5	12.5	0.0	3.50 (0.93)
29. To what degree are prismatic and solid models applied in teaching solid geometry?	22.2	44.4	11.1	11.1	11.1	3.56 (1.33)
30. To what extent do you feel it is appropriate to start teaching probability in Grade 1 Secondary?	11.1	55.6	33.3	0.0	0.0	3.78 (0.67)
Grade 2 Science Section						
31. To what degree do you feel that the curriculum teaching plan (8 weekly hours) is appropriate?	66.7	33.3	0.0	0.0	0.0	4.67 (0.50)
32. To what degree do you feel that the topic limits of progression in Grade 2 Scientific should:						
a. remain as it is?	22.2	33.3	22.2	11.1	11.1	3.44 (1.33)
b. be raised to higher level?	25.0	37.5	12.5	12.5	12.5	3.50 (1.41)
c. be deleted?	0.0	0.0	12.5	12.5	75.0	1.38 (0.74)
33. To what degree do you feel that the Ring Theory should:						
a. remain as it is?	37.5	12.5	25.0	0.0	25.0	3.38 (1.69)
b. be deleted?	0.0	25.0	12.5	12.5	50.0	2.13 (1.36)
34. To what extent does the Secondary Mathematics Curriculum succeed in presenting the unit of complex numbers?	22.2	77.8	0.0	0.0	0.0	4.22 (0.44)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
35. To what extent does the geometry part of the Mathematics Curriculum of Class II Secondary succeed in demonstrating the following units:						
a. analytic geometry (the circle)?	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
b. vectors?	22.2	66.7	11.1	0.0	0.0	4.11 (0.60)
c. trigonometric functions?	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
36. To what extent is there coherence between algebra and geometry in Grade 2 Secondary?	11.1	33.3	44.4	11.1	0.0	3.44 (0.88)
37. To what degree do you feel that the structure of Algebra in Grade 2 Secondary is logically sound in the sequence of its items and units?	22.2	55.6	22.2	0.0	0.0	4.00 (0.71)
38. To what degree do you feel there is wider scope in the present unit of geometry of transformations to what was previously studied by the student in preparatory level?	22.2	55.6	22.2	0.0	0.0	4.00 (0.71)
Grade 3 Science Section						
39. To what degree do you feel that curriculum-teaching plan for Grade 3 Science Section (8 weekly hours) is sufficient?	75.0	12.5	0.0	12.5	0.0	4.50 (1.07)
40. To what degree do you see that introduction to limits and continuity is appropriate?	22.2	55.6	11.1	11.1	0.0	3.89 (0.93)
41. To what degree do you agree that teaching the definition of the limit at a point is important?	22.2	66.7	11.1	0.0	0.0	4.11 (0.60)
42. To what degree do you see the student has benefited from studying derivatives in differential applications?	33.3	33.3	33.3	0.0	0.0	4.00 (0.87)
43. To what degree is there integration in the curriculum among maxima, regression, and inflection points in the curve of a function f (x)?	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
44. To what degree do you feel there is logical sequence in topics of the unit on differentiation?	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
45. To what degree are the present theories included in the curriculum important for Grade 3 Scientific?	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
46. To what extent is the unit of conical sections integral to what has been studied in Analytic Geometry, and geometry of transformations?	11.1	77.8	11.1	0.0	0.0	4.00 (0.50)
47. To what degree do you feel that partition is a good introduction to integration?	33.3	55.6	11.1	0.0	0.0	4.22 (0.67)
48. To what degree do you feel that the curriculum has achieved objectives of teaching functions topics?	0.0	75.0	12.5	12.5	0.0	3.63 (0.74)
49. To what degree do you feel that integrability (Reman test) of function is appropriate to students abilities and should:						
a. stay as it is?	0.0	66.7	11.1	11.1	11.1	3.33 (1.12)
b. be deleted completely?	0.0	22.2	22.2	11.1	44.4	2.22 (1.30)
50. To what degree do you feel that complete function is appropriate to student abilities in Grade 3 Science section?	11.1	44.4	22.2	22.2	0.0	3.44 (1.01)
51. To what degree do you feel that integration applications are sufficient and appropriate (areas and volumes)?	44.4	33.3	11.1	11.1	0.0	4.11 (1.05)
52. To what extent was the curriculum successful in relating experimental applications of differentiation and integration (calculus)?	22.2	55.6	22.2	0.0	0.0	4.00 (0.71)
53. To what degree do you feel that the following exist in the Probability Curriculum for Grade 3 Scientific:						
a. topic - sequence?	44.4	44.4	11.1	0.0	0.0	4.33 (0.71)
b. no pit-falls?	11.1	66.7	11.1	11.1	0.0	3.78 (0.83)
54. To what degree do you feel that the Mathematics Curriculum especially probability in Grade 3 Science section needs the algebra of sets?	11.1	44.4	33.3	11.1	0.0	3.56 (0.88)
55. To what degree do you feel that probability curriculum is useful to the student in his academic life?	44.4	44.4	11.1	0.0	0.0	4.33 (0.71)
56. To what degree do you feel that the Statistics Curriculum is integrative in its topics are in logical sequence?	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
57. To what extent was the curriculum successful in presenting the statistics unit from the following aspects:						
a. percentile and percentile rank?	11.1	44.4	44.4	0.0	0.0	3.67 (0.71)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
57. To what extent was the curriculum successful in presenting the statistics unit from the following aspects: (cont'd)						
b. actual parameters to classes?	11.1	55.6	22.2	0.0	11.1	3.56 (1.13)
c. dispersion and its measures?	33.3	55.6	0.0	11.1	0.0	4.11 (0.93)
d. regression and line of regression?	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
e. distribution of averages?	11.1	55.6	22.2	0.0	11.1	3.56 (1.13)
58. To what degree do you feel there are short comings in the structure of the Calculus Curriculum in the following aspects:						
a. graphical illustrations?	11.1	11.1	55.6	11.1	11.1	3.00 (1.12)
b. varieties of examples?	11.1	33.3	22.2	11.1	22.2	3.00 (1.41)
c. direct exercises?	11.1	22.2	44.4	11.1	11.1	3.11 (1.17)
d. hierarchical and varieties of problems?	11.1	33.3	33.3	11.1	11.1	3.22 (1.20)
59. To what degree do you feel the absence of some topics - such as partial fractions in Grade 3 Secondary?	11.1	55.6	22.2	11.1	0.0	3.67 (0.87)
60. To what extent do you agree there are shortcomings in the structure of the probability Curriculum for Grade 3 Science section?	0.0	22.2	33.3	33.3	11.1	2.67 (1.00)
61. To what degree do you feel there are shortcomings in the structure of the Statistics Curriculum for Grade 3 Science section?	0.0	44.4	11.1	44.4	0.0	3.00 (1.00)
62. To what degree do you feel that the addition of the following topics at the Secondary Level are important: partial fractions and mathematical deductions?	55.6	22.2	11.1	11.1	0.0	4.22 (1.09)
Grade 2 (Art Section)						
63. To what extent are the weekly hours allocated for teaching (2 hours) sufficient for realizing the desired goals of the curriculum?	11.1	33.3	11.1	33.3	11.1	3.00 (1.32)
64. To what degree do you feel that content of the units of powers and logarithms is appropriate in Grade 2 and should:						
a. stay as it is?	22.2	66.7	11.1	0.0	0.0	4.11 (0.60)
b. be deleted?	0.0	0.0	0.0	33.3	66.7	1.33 (0.50)
65. To what degree do you feel that linear programming is appropriate to the abilities of Grade 2 literary and should:						
a. stay as it is?	11.1	33.3	33.3	11.1	11.1	3.22 (1.20)
b. be deleted?	0.0	25.0	0.0	37.5	37.5	2.13 (1.25)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Grade 3 (Art Section)						
66. To what degree do you feel that time allotted to teaching Mathematics to Grade 3 Literary (2 weekly hours) is adequate?	12.5	37.5	12.5	25.0	12.5	3.13 (1.36)
67. To what extent do you feel that differentiation is important to Grade 3 Literary students?	11.1	55.6	33.3	0.0	0.0	3.78 (0.67)
68. To what degree do you feel that the topics of probability and statistics are necessary for students?	33.3	44.4	22.2	0.0	0.0	4.11 (0.78)
69. To what degree is there continuity and integration in the Mathematics Curriculum for Grade 3 Literary?	0.0	44.4	55.6	0.0	0.0	3.44 (0.53)
70. To what degree do you feel that the Mathematics Curriculum for Grade 3 Literary is lacking for some topics?	11.1	0.0	44.4	44.4	0.0	2.78 (0.97)
71. To what extent does the Mathematics Curriculum content for Grade 3 Literary achieve individual-learning principles?	0.0	22.2	77.8	0.0	0.0	3.22 (0.44)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: General Science
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were long-term objectives considered in selecting items that tested the General Science Curriculum content at secondary level?	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
2. To what extent were weekly hours allocated for teaching the General Science Curriculum sufficient to achieve desired objectives in Omani curriculum?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
3. To what extent does General Science Curriculum for the class you supervise emphasize historical aspects of science?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
4. To what extent does the General Science Curriculum encourage students to participate in specific activities such as: science club, contests, and science fairs?	33.3	0.0	66.7	0.0	0.0	3.67 (1.03)
5. To what extent is integration illustrated in the curriculum content of science subject-matter in Grades 2 and 3?	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
6 To what extent is there integration of the curricula content of science subject-matters in primary, preparatory, and secondary levels?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
7. To what extent do curriculum content and processes encourage students to understand that scientific information is both a systematic organization of knowledge and a way of thinking?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
8. To what extent are experiments and field studies:						
a. an integrative part of the General Science Curriculum?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
b. a basic part of the methodology of science education?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
9. To what extent does the Science Curriculum help students' development of the following critical-thinking attitudes and basic habits:						
a. postpone judgement	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
b. test accuracy of data	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
c. evaluate data sources?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
d. use of several information sources?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent does the Science Curriculum help students develop logical thinking skills and the use of this style of thinking concerning the following:						
a. deduction: use and application of a general principle to a group of specific situations and examples?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
b. induction: inference of a general principle from analysis and case-study of specific?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
11. A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives:						
a. develop student's concern for his natural environment?	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
b. help students understand their natural environment and interpret its phenomena?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
c. adapt to continuing changes in the natural environment?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
d. identify natural resources in Arabic environment in general and Oman in particular?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
e. perceive the role that natural resources play in raising the living standard for both the individual and society?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
f. identify dangers and hazards of pollution and how they could participate in protecting their environment from these dangers?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
g. develop desired scientific attitudes towards the following:						
1. open-mindedness and inquisitiveness?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
2. postponing judgement until they have collected all relevant information?	20.0	20.0	60.0	0.0	0.0	3.60 (0.89)
3. disproving myths and emphasizing cause-effect?	40.0	0.0	60.0	0.0	0.0	3.80 (1.10)
4. adopting experimental procedures as means of knowledge development?	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
5. precise observation?	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
6. respect for the opinions of others and readiness to change personal opinion in light of new information?	20.0	20.0	40.0	20.0	0.0	3.40 (1.14)
7. cooperation and ability of individual to work in a group?	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
8. independence in thinking and work?	20.0	20.0	60.0	0.0	0.0	3.60 (0.89)
h. learning scientific-method thinking and developing habit of using this method in solving every day problems?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
11. A list of objectives to be achieved are included in the General Science Curriculum for secondary level. To what degree do you feel the General Science Curriculum succeeded in achieving the following objectives: (cont'd)						
i. develop students' appreciation and respect for manual work and its role in social progress?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
j. develop students' appreciation of the efficiency of the universe as a system and to appreciate the natural beauty that affects the greatness of the Almighty God?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
k. discover and develop creative abilities of the students?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
l. discover and develop scientific attitude of the students?	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
m. develop the proper hygiene habits that enhance their natural physical growth through:						
1. identifying the various parts of the body and how they function to achieve physical growth?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
2. identifying the proper nutritional habits and rules to protect themselves against diseases?	33.3	33.3	16.7	16.7	0.0	3.83 (1.17)
n. develop scientific reading habits as a way of self-learning?	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
o. develop manipulative skills through using standard equipment and also through designing and making simple tools and equipment needed to study science?	33.3	0.0	66.7	0.0	0.0	3.67 (1.03)
12. Several independent units of biology, geology, physics, and chemistry are included in the General Science Curricula of Grades 2 and 3 Secondary. To what degree do you feel that this process of educational material organization supplies the student with the integrative scientific knowledge required?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
13. To what degree do you feel that the General Science Curriculum for grades 2 and 3 encourages the development of the following skills:						
a. fondness for and preference of study of science?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
b. application of knowledge to everyday life situations?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
c. manipulation and implementation of instruments and apparatus?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
d. develop science - consciousness in enriching man's life?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what degree do you feel that the General Science Curriculum for grades 2 and 3 encourages the development of the following skills: (cont'd)						
e. appreciate the role of scientists in general and Muslim scientists in particular in the progress of human society?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
14. To what degree do you feel that the Science Curriculum for Grades 2 and 3 is appropriate for the intellectual maturity standard of students concerning the following:						
a. amount of scientific knowledge?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
b. degree of difficulty in treating it?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
c. degree of specialization of scientific knowledge as independent topics: biology, chemistry, physics, geology, and astronomy?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
d. time allocated to science education in each grade of this level?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
e. standard of handling & manipulation of apparatus and equipment necessary for studying these subject matters?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
f. degree of cognitive skills necessary to understand and comprehend scientific knowledge inculcated in the curriculum?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
15. To what degree do you feel the following concepts for Grades 2 and 3 are appropriate for the cognitive level of students and class:						
First - Grade 2 (Arts Section)						
Unit 1: Science and Scientists						
1. science structure						
a. scientific material (knowledge structure of science)?	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
b. methodology of scientific thinking?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
2. characteristics of science?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
3. scientific processes?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
4. employment of scientific thinking in solution of everyday problems?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Unit 2: Evolution of Astronomy						
1. astronomy in ancient times?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
2. origin of the universe?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
3. stars and their properties?	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
4. stars grouping?	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
5. scientists' views about stars?	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
6. solar system?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
7. some astronomical phenomena in space?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
8. finding directions by stars and compass?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Unit 3: Transportation						
1. means of land transportation?	16.7	16.7	50.0	16.7	0.0	3.33 (1.03)
2. means of sea transportation?	20.0	20.0	40.0	20.0	0.0	3.40 (1.14)
3. means of air transportation	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
Unit 4: Communication						
cables, telephones, radios, televisions, radar, and satellites?						
Unit 5: Science and Human Health						
1. effect of disease in the individual and society?	0.0	40.0	40.0	0.0	20.0	3.00 (1.23)
2. immunity and disease prevention?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
3. effect of science in discovering and treating contagious diseases?	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
4. diseases resulting from the malfunction of one of body organs?	60.0	20.0	20.0	0.0	0.0	4.40 (0.89)
5. contagious diseases?	40.0	60.0	0.0	0.0	0.0	4.40 (0.55)
Unit 6: Science and the world food problem						
1. importance of nutrition to man's body?	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
2. world-food problems?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
3. causes of food problems	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
4. the role of technology in the solution of food problem?						
a. horizontal expansion in agriculture?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
b. vertical expansion in agriculture?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
c. increasing animal proteins?	40.0	20.0	40.0	0.0	0.0	4.00 (1.00)
d. manufacturing and preserving agricultural products?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
e. artificial meat?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
Second - Grade 3 (Arts Section)						
Unit 1: Oil						
1. discovery of oil and its uses?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
2. theories of oil formation?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
3. oil explorations?	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
4. oil work problems?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
5. means of oil transport?	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
6. oil refineries?	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
7. present importance of oil?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
8. oil dependent industries?	20.0	80.0	0.0	0.0	0.0	4.20 (0.45)
Unit 2: Solar Energy						
1. solar radiations reaching the earth?	40.0	60.0	0.0	0.0	0.0	4.40 (0.55)
2. indirect solar energy?	60.0	20.0	20.0	0.0	0.0	4.40 (0.89)
3. direct solar energy?	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
4. thermal applications of solar radiations?	40.0	20.0	40.0	0.0	0.0	4.00 (1.00)
5. electricity from solar radiations?	20.0	80.0	0.0	0.0	0.0	4.20 (0.45)
6. futuristic look of producing electricity from solar energy?	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Unit 3: Nuclear Energy						
1. nuclear structure?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
2. peaceful utilization of radioactive isotopes?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
3. nuclear fission?	20.0	20.0	60.0	0.0	0.0	3.60 (0.89)
4. nuclear fusion?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Unit 4: Environment and Pollution						
1. man and environment:						
a. carbon-cycle in nature?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
b. nitrogen-cycle in nature?	40.0	20.0	40.0	0.0	0.0	4.00 (1.00)
c. water-cycle in nature	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
d. integration of environmental components?	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
2. contemporary technology and its effects on environment:						
a. sea pollution?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
b. bacterial and chemical pollution?	20.0	60.0	20.0	0.0	0.0	4.00 (0.71)
c. pollution by hard and radioactive substances?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
d. kinds of harmful radiations?	40.0	60.0	0.0	0.0	0.0	4.40 (0.55)
e. air pollution?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
f. hazards of radioactive pollution to man?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
g. soil pollution?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
h. noise pollution?	50.0	0.0	50.0	0.0	0.0	4.00 (1.10)
Unit 5: Meteorology and Climate Forecast						
1. meteorology and climate forecast?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
2. aerosphere?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
3. meteorologic parameters and their measurements?	20.0	20.0	60.0	0.0	0.0	3.60 (0.89)
4. air masses and air fronts?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
5. cyclons & anticyclons?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
6. importance of meteorology and climate forecast?	40.0	20.0	40.0	0.0	0.0	4.00 (1.00)

16. Some new concepts introduced into the secondary curriculum may have raised some disagreements about their appropriateness for grades at this level. Please give your opinion concerning the following curricular topics using the following measurement:

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1 = appropriate and the concept stays in place? 2 = easy and to be moved to a lower grade? 3 = difficult and to be moved to a higher grade? 4 = higher than the secondary standard and to be moved to university level? 5 = to be deleted?						
Grade 2:						
a. stars - characteristics and groups?	60.0	20.0	20.0	0.0	0.0	4.40 (0.89)
b. solar system?	60.0	20.0	20.0	0.0	0.0	4.40 (0.89)
c. internal combustion engine?	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
d. diesel engine?	20.0	0.0	60.0	20.0	0.0	3.20 (1.10)
e. radio?	20.0	0.0	60.0	0.0	20.0	3.00 (1.41)
f. cathode-ray tube and television?	0.0	20.0	60.0	0.0	20.0	2.80 (1.10)
Unit 3:						
a. nuclear energy (nuclear fission and nuclear fusion)?	66.7	16.7	0.0	16.7	0.0	4.33 (1.21)
b. content of earth atmosphere?	50.0	16.7	0.0	33.3	0.0	3.83 (1.47)
c. atmospheric humidity and its measurement?	66.7	16.7	0.0	16.7	0.0	4.33 (1.21)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: History
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani History Curriculum. This means that a group of concepts are treated at the primary and secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the History Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	12.5	62.5	25.0	0.0	0.0	3.88 (0.64)
2. To what extent do the curricula of History, Human Culture, and Civic Education realize the following:						
a. needs of student after graduation?	12.5	50.0	37.5	0.0	0.0	3.75 (0.71)
b. long-range educational objectives?	12.5	50.0	25.0	12.5	0.0	3.63 (0.92)
c. integration with the topics of both the preparatory and secondary levels?	57.1	14.3	28.6	0.0	0.0	4.29 (0.95)
d. coherence among topics and logical sequence?	37.5	25.0	12.5	25.0	0.0	3.75 (1.28)
e. emphasis on contemporary issues and current events?	37.5	37.5	12.5	12.5	0.0	4.00 (1.07)
f. horizontal (parallel) integration among subjects - History, Civic Education, and Human Culture?	37.5	25.0	25.0	12.5	0.0	3.88 (1.13)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	12.5	37.5	50.0	0.0	0.0	3.63 (0.74)
b. utilizing the environment as a source of learning?	25.0	37.5	25.0	12.5	0.0	3.75 (1.04)
c. library reference work and field research?	25.0	0.0	37.5	25.0	12.5	3.00 (1.41)
d. training in collection of information through scientific methods?	25.0	0.0	37.5	25.0	12.5	3.00 (1.41)
e. using media as educational material?	12.5	50.0	25.0	0.0	12.5	3.50 (1.20)
4. To what extent does coherence exist between the three curricula (History, Civic Education, and Human Culture) and each of the following:						
a. Geography?	12.5	37.5	50.0	0.0	0.0	3.63 (0.74)
b. Contemporary Problems?	12.5	37.5	25.0	25.0	0.0	3.38 (1.06)
c. Islamic Education?	25.0	37.5	25.0	12.5	0.0	3.75 (1.04)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. History?	37.5	50.0	0.0	12.5	0.0	4.13 (0.99)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient: (cont'd)						
b. Civic Education?	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
c. Human Culture?	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
6. To what extent do the three curricula (Civic Education, Human Culture, and History) foster the following educational attitudes:						
a. direct reference to the original texts?	12.5	37.5	37.5	12.5	0.0	3.50 (0.93)
b. encouragement of independent critical thinking?	25.0	25.0	50.0	0.0	0.0	3.75 (0.89)
c. satisfaction of applying knowledge to daily life situations?	25.0	0.0	62.5	12.5	0.0	3.38 (1.06)
d. application of scientific and historic method in research and thinking?	25.0	12.5	50.0	12.5	0.0	3.50 (1.07)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to acheive objectives?	25.0	12.5	50.0	0.0	12.5	3.38 (1.30)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
9. To what extent did learner's activities help to develop the following attitudes:						
a. sound thinking?	12.5	50.0	37.5	0.0	0.0	3.75 (0.71)
b. interpretation?	12.5	12.5	75.0	0.0	0.0	3.38 (0.74)
c. rationalization?	12.5	25.0	62.5	0.0	0.0	3.50 (0.76)
d. analysis?	12.5	12.5	75.0	0.0	0.0	3.38 (0.74)
e. synthesizing?	12.5	12.5	62.5	12.5	0.0	3.25 (0.89)
f. forming opinions?	12.5	0.0	62.5	25.0	0.0	3.00 (0.93)
10. To what extent did the History Curriculum for Grade 1 help the student perceive time and place relationsips and use them as a fundamental core in studying the history of modern Europe?	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
11. To what extent does the curriculum give students the opportunity to be aware of the historical events of the modern and contemporary world and various existing political, economic, social, and cultural problems?	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
12. To what extent does integration and coherence exist among Grade 1 history topics from European Renaissance to World War II?	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent do the textbook topics contribute to covering all aspects of Modern European History?	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
14. To what extent is the Arabic culture's influence on Europe's Renaissance in the 15th and 16th centuries and later developments illustrated in the textbooks?	12.5	62.5	12.5	12.5	0.0	3.75 (0.89)
15. To what extent do curriculum topics illustrate positive influences of European Culture on the Arab World?	25.0	50.0	12.5	12.5	0.0	3.88 (0.99)
16. To what extent does the curriculum allow students to realize the following:						
a. appreciate artistic, literary, and scientific accomplishments of European Renaissance?	37.5	25.0	25.0	12.5	0.0	3.88 (1.13)
b. take pride in the courageous spirit of resisting European colonialism exhibited by Arabs and muslims in general and Omani in particular?	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
17. To what extent were figures, maps, and drawings exhibited in the textbook sufficient to understanding curriculum topics?	12.5	62.5	12.5	0.0	12.5	3.63 (1.19)
18. To what extent did historical texts in the textbook contribute to generating enthusiasm, stimulating students to study this period, and making the material relevant?	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
History: Grade 2 Secondary (Art Section)						
19. To what extent are topics of the History Curriculum for Grade 2 secondary (arts section) in accordance with the following:						
a. appointed curriculum plan?	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
b. desired objectives of the curriculum?	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
20. To what extent do curriculum topics contribute to modifying the following aspects of student behavior:						
a. deepening of faith in Islam?	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
b. taking pride in human and Arabic values?	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
c. cooperation?	25.0	37.5	25.0	12.5	0.0	3.75 (1.04)
d. loyalty to Arab and Islamic nation?	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
e. loyalty to Oman?	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
21. To what extent was the curriculum successful in treating the following aspects of Islamic Culture: development, origin, illustrations, and characteristics?	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
22. To what extent does the curriculum allow the treatment of the following topics:						
a. influence of Islamic Culture in European Culture?	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
b. fighting the Mongol and Crusade dangers?	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
c. spread of Islam in Central and Southern Asia?	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
23. To what extent is coherence realized between curricula content of this secondary class and that of Preparatory Grade 2 and Primary Grade 5?	25.0	25.0	50.0	0.0	0.0	3.75 (0.89)
24. To what extent does the curriculum illustrate fundamental historical origins of Arab and Islamic Unity?	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
25. To what extent does the curriculum stimulate students' motivation to read and reference the original sources of the history of the Arab and Islamic Nation?	25.0	25.0	37.5	12.5	0.0	3.63 (1.06)
26. To what extent do original texts included in topics of curriculum content contribute to practical application and providing proofs that help understanding and interpretation?	25.0	25.0	50.0	0.0	0.0	3.75 (0.89)
27. To what extent do figures and maps included contribute to understanding and illustrating curriculum topics?	12.5	37.5	37.5	0.0	12.5	3.38 (1.19)
History: Grade 3 Secondary (Arts Section)						
28. To what extent was the History Curriculum for Grade 3 Secondary (Arts Section) successful in covering the following topics:						
a. history of the Arab Gulf before Islam and Islamic Eras?	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)
b. history of the Arab Gulf in modern times?	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
c. navigation and sea-life in Islamic Eras?	50.0	50.0	0.0	0.0	0.0	4.50 (0.54)
d. history of Abadiyah?	50.0	50.0	0.0	0.0	0.0	4.50 (0.54)
29. To what extent was the curriculum successful in achieving the general objectives of studying the topic - the History of Oman and the Arab Gulf?	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
30. To what extent does the curriculum encourage stimulation of student's motivation to read and reference original sources for studying the History of Oman and the Arab Gulf?	12.5	25.0	62.5	0.0	0.0	3.50 (0.76)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
31. To what extent is coherence and continuity achieved between the History Curricula of Grade 3 secondary and those of Grades 1 and 2 secondary?	12.5	25.0	25.0	0.0	37.5	2.75 (1.58)
32. As a secondary level History teacher, are you convinced that in order to enrich the content of Grade 3 History (Arts Section) that the following topics related to the history of Oman and the Arab Gulf be included in the curriculum:						
a. navigation and marine life?	12.5	62.5	0.0	25.0	0.0	3.63 (1.06)
b. marine natural phenomena in Islam literature?	12.5	62.5	0.0	25.0	0.0	3.63 (1.06)
c. observation and measurement instruments?	25.0	50.0	0.0	25.0	0.0	3.75 (1.17)
d. natural and marine phenomena, such as tide and ebb and marine currents?	37.5	37.5	12.5	12.5	0.0	4.00 (1.07)
e. particular phenomena of vegetation (herbs) in deserts and the winds?	14.3	57.1	0.0	28.6	0.0	3.57 (1.13)
33. To what extent were the curriculum and its contributions successful in modifying student behavior towards:						
a. loyalty to the Sultanate?	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
b. loyalty to Gulf society and Arab nation?	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)
c. understanding history and inferences of historic events based on present methods of availability of data and documentation?	37.5	12.5	25.0	25.0	0.0	3.63 (1.30)
d. re-birth of the glory of the past?	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
e. perceiving historic development of the Sultanate of Oman and the Arab Gulf?	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
34. To what extent does the curriculum encourage the student to explore and understand the interaction of man with the Omani and Gulf environment?	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
35. To what extent are instructional materials related to the curriculum sufficient to clarify concepts and perceptions of time and place dimensions in order to comprehend the history of this region?	12.5	62.5	25.0	0.0	0.0	3.88 (0.64)
36. To what extent do examples of activities mentioned at the end of every lesson contribute to helping students discover and comprehend facts and concepts?	12.5	50.0	25.0	12.5	0.0	3.63 (0.92)
37. To what extent was the curriculum successful in training students in the following:						
a. chairing open discussion?	12.5	50.0	25.0	12.5	0.0	3.63 (0.92)
b. performing research?	12.5	12.5	62.5	12.5	0.0	3.25 (0.89)
c. writing reports?	12.5	0.0	62.5	25.0	0.0	3.00 (0.93)
d. using the school textbook as an important learning source?	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Geography & Contemporary Problems
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been in designing the content of the Omani Geography and Contemporary Problems Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Geography and Contemporary Problems Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
2. To what extent do the curricula of Geography, Civic Education and Human Culture realize the following:						
a. needs of students after graduation?	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
b. long-range educational objectives?	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
c. integration with the topics of both the preparatory and secondary level topics?	14.3	28.6	42.9	14.3	0.0	3.43 (0.98)
d. coherence among topics and logical sequence?	0.0	42.9	28.6	28.6	0.0	3.14 (0.90)
e. emphasis on contemporary issues and current events?	28.6	28.6	42.9	0.0	0.0	3.86 (0.90)
f. horizontal (parallel) integration among subjects - Geography, Civic Education and Human Culture?	14.3	42.9	14.3	14.3	14.3	3.29 (1.38)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	0.0	71.4	14.3	0.0	14.3	3.43 (1.13)
b. utilizing the environment as a source of learning?	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
c. library reference work and field research?	0.0	0.0	28.6	28.6	42.9	1.86 (0.90)
d. training in collection of information through scientific methods?	0.0	0.0	42.9	28.6	28.6	2.14 (0.90)
e. using media as educational material?	14.3	28.6	28.6	14.3	14.3	3.14 (1.35)
4. To what extent does coherence exist between the three curricula (Geography, Civic Education, and Human Culture) and each of the following:						
a. History?	0.0	42.9	28.6	14.3	14.3	3.00 (1.16)
b. Contemporary Problems?	0.0	57.1	14.3	14.3	14.3	3.14 (1.22)
c. Islamic Education?	14.3	28.6	57.1	0.0	0.0	3.57 (0.79)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. Geography?	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
b. Civic Education?	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
c. Human Culture?	28.6	28.6	14.3	0.0	28.6	3.29 (1.70)
6. To what extent do the three curricula (Geography, Civic Education, and Human Culture) foster the following educational attitudes:						
a. direct reference to the original texts?	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
b. encouragement of independent critical thinking?	14.3	14.3	57.1	0.0	14.3	3.14 (1.22)
c. satisfaction of applying knowledge to daily life situations?	0.0	28.6	42.9	0.0	28.6	2.71 (1.25)
d. application of scientific and historic method in research and thinking?	14.3	14.3	57.1	0.0	14.3	3.14 (1.22)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to acheive objectives?	0.0	28.6	42.9	0.0	28.6	2.71 (1.25)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
9. To what extent did learner's activities help to develop the following attitudes:						
a. sound thinking?	14.3	42.9	14.3	14.3	14.3	3.29 (1.38)
b. interpretation?	0.0	42.9	42.9	0.0	14.3	3.14 (1.07)
c. rationalization?	14.3	14.3	57.1	0.0	14.3	3.14 (1.22)
d. analysis?	0.0	14.3	71.4	0.0	14.3	2.86 (0.90)
e. synthesizing?	0.0	28.6	42.9	14.3	14.3	2.86 (1.07)
f. forming opinions?	14.3	14.3	42.9	14.3	14.3	3.00 (1.29)
10. To what extent was the Geography Curriculum at Secondary Level committed to the principle of non-repetition?	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
11. To what extent does the Geography Curriculum at the Secondary Level contribute to the utilization of logical thinking, in addition to organized content of information?	0.0	57.1	28.6	14.3	0.0	3.43 (0.79)
12. To what extent did the Geography Curriculum depend on experimental and field studies?	0.0	28.6	14.3	28.6	28.6	2.43 (1.27)
13. To what extent did the curriculum avoid topics beyond the intellect and perception of students?	0.0	71.4	0.0	28.6	0.0	3.43 (0.98)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
14. To what extent was the curriculum successful in preparing the student to continue his studies at a higher level?	0.0	57.1	14.3	14.3	14.3	3.14 (1.22)
15. To what extent was integration among Geography and Contemporary Problems Curricula in Grades I, II, and III in the Arts Section realized?	0.0	71.4	14.3	14.3	0.0	3.57 (0.79)
16. To what extent were teachers successful in using different instructional materials to achieve the objectives of the Geography Curriculum at the Secondary Level?	0.0	42.9	57.1	0.0	0.0	3.43 (0.54)
17. To what extent did the curriculum help students develop attitudes and basic skills for critical thinking in the following:						
a. postponing judgement?	0.0	14.3	57.1	28.6	0.0	2.86 (0.69)
b. utilizing several information sources?	0.0	14.3	42.9	42.9	0.0	2.71 (0.76)
c. perceiving concepts, research methods, and scientific thinking?	0.0	14.3	57.1	28.6	0.0	2.86 (0.69)
18. To what extent did the content of Geography Curriculum contribute to students' acquisition of the following cognitive and psychomotor skills:						
a. ability to read and understand geographical maps?	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
b. ability to draw maps and mark appropriate geographic symbols?	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
c. understanding statistical data?	0.0	28.6	28.6	14.3	28.6	2.57 (1.27)
d. understanding graphs?	0.0	28.6	14.3	28.6	28.6	2.43 (1.27)
e. use of statistical data?	0.0	14.3	42.9	42.9	0.0	2.71 (0.76)
f. graphic representation?	0.0	0.0	57.1	42.9	0.0	2.57 (0.54)
g. satisfactorily locating positions on maps?	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
h. satisfactorily interpreting locations?	0.0	28.6	28.6	42.9	0.0	2.86 (0.90)
i. applying all functions and attitudes related to previous items?	0.0	14.3	42.9	28.6	14.3	2.57 (0.98)
19. To what extent was the Geography Curriculum successful in the following:						
a. enlarging the conceptual scope from one class to the next through application of a concept to a wider area of examples?	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
b. intensifyinng the students' comprehension of concepts gradually to meet the grade level requirements?	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
20. To what extent was the Grade I Curriculum successful in students' acquisition of concepts that will help them understand the content of the curriculum of Grades 2 and 3 in the Arts Section?	14.3	28.6	42.9	14.3	0.0	3.43 (0.98)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
21. To what extent was the content of Grade I Curriculum successful in its treatment of elements of hydraulic system unknown by students at the preparatory level?	14.3	14.3	42.9	28.6	0.0	3.14 (1.07)
22. To what extent does the First Grade Secondary Level curriculum adequately cover the major elements of earth system?	14.3	42.9	28.6	14.3	0.0	3.57 (0.98)
23. To what extent was the curriculum successful in illustrating the concept of living systems and in conceptualizing such a system?	14.3	28.6	28.6	28.6	0.0	3.29 (1.11)
24. To what extent was the curriculum successful in providing sufficient activities and exercises?	0.0	28.6	71.4	0.0	0.0	3.29 (0.49)
25. To what degree do you perceive the plan is adaptable to the curriculum content of Grade I?	28.6	14.3	28.6	28.6	0.0	3.43 (1.27)
Geography: Grade II (Arts Section)						
26. New units of sub-geography subject-matter such as applied geography, construction, national industrialization citizenship and urbanization were included in the curriculum. To what degree do you perceive that these additions had the following characteristics:						
a. interesting and motivating for student's ability to understand them?	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
b. new in content in comparison to previous Geography topics studied by the student?	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
27. To what extent was the curriculum successful in:						
a. explaining the meaning of "Applied Geography" and its application?	28.6	28.6	42.9	0.0	0.0	3.86 (0.90)
b. helping the students to understand the difference among different human habitats, illustrating latitude and position, with concerned applications to the Sultanate?	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
c. familiarizing students with the concept of national settlement and its rationale?	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
28. To what extent was the curriculum successful in illustrating types of transportation, and their roles in development and enhancement of trade exchange internally and externally?	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
29. To what extent was the curriculum successful in illustrating concepts relating to oil and in educating students to all issues relative to economic, social, and political effects?	14.3	57.1	14.3	14.3	0.0	3.71 (0.95)
30. A number of indevidual and group projects were included in the Grade 2 Curriculum. To what degee were the following characteristics realized:						
a. even distribution?	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
b. contribution to curriculum content enrichment and development?	0.0	57.1	14.3	14.3	14.3	3.14 (1.22)
31. A great number of activities and exercises were included in the curriculum; to what extent did these:						
a. contribute to clarifying and enriching the content?	0.0	57.1	14.3	14.3	14.3	3.14 (1.22)
b. motivating students to analyze, synthesize and comprehend through these activities?	0.0	57.1	14.3	14.3	14.3	3.14 (1.22)
32. To what extent did the plan coincide with the curriculum content for Grade 2 in the Arts Section?	28.6	42.9	14.3	14.3	0.0	3.86 (1.07)
Geography: Grade 3 (Arts Section)						
33. The curriculum started with a Unit in Geographic Thought, called: "Region Construction". To what extent did it contribute toward:						
a. illustrating regional construction mentionedin in other geography curriculum units?	42.9	14.3	14.3	28.6	0.0	3.71 (1.38)
b. simplifying regional thought in order to be understood intellectually?	42.9	14.3	14.3	28.6	0.0	3.71 (1.38)
c. explaining the geographers' reasons for employing regional systems?	28.6	28.6	14.3	14.3	14.3	3.43 (1.51)
34. The content of the curriculum dealt with regions situated between the Equator and Middle Zones. To what degree do you see that such limiting is useful to students' particular understaning of his local environment?	14.3	28.6	14.3	14.3	28.6	2.86 (1.57)
35. To what extent was the curriculum successful in:						
a. identifying and interpreting the position of the Sultanate?	57.1	0.0	28.6	14.3	0.0	4.00 (1.29)
b. describing, analyzing, and rationalizing the natural topography of the Sultanate?	57.1	14.3	0.0	28.6	0.0	4.00 (1.41)
c. division of the Sultanate into its geographical regions?	57.1	14.3	0.0	28.6	0.0	4.00 (1.41)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
35. To what extent was the curriculum successful in: (cont'd)						
d. familiarizing students with agricultural products and facilities in the Sultanate?	42.9	28.6	14.3	14.3	0.0	4.00 (1.16)
e. knowing the establishment and development of industry in the Sultanate?	42.9	14.3	28.6	14.3	0.0	3.86 (1.22)
f. explaining the State's specific philosophy of service to citizens throughout the Sultanate?	42.9	14.3	14.3	28.6	0.0	3.71 (1.38)
36. To what extent did the content contribute to illustrating the following:						
a. general features of the Arabian Gulf region?	42.9	28.6	14.3	14.3	0.0	4.00 (1.16)
b. interpretation of the weather conditions in the Arabian Gulf region?	28.6	42.9	0.0	14.3	14.3	3.57 (1.51)
c. explanation of water resources and forming positive attitudes to dealing with them in the Arabian Gulf region?	28.6	42.9	0.0	28.6	0.0	3.71 (1.25)
d. specification of population characteristics in the Arabian Gulf and past and present transformations of Gulf States?	28.6	28.6	28.6	14.3	0.0	3.71 (1.11)
e. economic concepts that encompassed the Arabian Gulf region?	42.9	14.3	28.6	14.3	0.0	3.86 (1.22)
37. To what extent were activities and exercises adequate?	14.3	42.9	14.3	14.3	14.3	3.29 (1.38)
Contemporary Problems for Grades 2 and 3 (Science Section)						
38. A number of universal contemporary problems were included in the curriculum structure with the understanding that the solution of these problems should be derived from the reality of the Sultanate, the Gulf Region and the Arab World, to what degree do you see that the follow-up of current events were:						
a. interesting and exciting from the students point of view to follow-up?	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
b. useful in students' acquisition of the ability to distinguish the valuable from the non-valuable flood of information in the mass media?	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
c. helpful for students to perceive time and place relationships?	28.6	42.9	14.3	14.3	0.0	3.86 (1.07)
d. enlightening students to the extent of interaction between the Omani environment and other environments?	28.6	28.6	42.9	0.0	0.0	3.86 (0.90)
39. A number of contemporary problems were included in the curricula for Grade 2 and 3 Science Section. To what extent does the curriculum content:						
a. illustrate these problems?	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
39. A number of contemporary problems were included in the curricula for Grade 2 and 3 Science Section. To what extent does the curriculum content:						
b. show the negative aspects of these problems?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
c. motivate students to adopt positive opinions and ideas toward them?	28.6	57.1	14.3	0.0	0.0	4.14 (0.69)
40. To what degree does the curriculum connect those scientifically and experimentally-based problems with other relative sciences so that there is a comprehensive scope to those problems?	14.3	57.1	14.3	14.3	0.0	3.71 (0.95)
41. To what degree do you see this plan sufficient?	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Civic Education
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani Civic Education Curriculum. This means that a group of concepts are treated at the primary and secondary levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Civic Education Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
2. To what extent do the curricula of Civic Education, Human Culture, and History realize the following:						
a. needs of student after graduation?	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
b. long-range educational objectives?	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
c. integration with the topics of both the preparatory and secondary levels?	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
d. coherence among topics and logical sequence?	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
e. emphasis on contemporary issues and current events?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
f. horizontal (parallel) integration among subjects - Civic Education, Human Culture, and History?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
b. utilizing the environment as a source of learning?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
c. library reference work and field research?	0.0	0.0	50.0	16.7	33.3	2.17 (0.98)
d. training in collection of information through scientific methods?	0.0	0.0	50.0	33.3	16.7	2.33 (0.82)
e. using media as educational material?	0.0	16.7	50.0	0.0	33.3	2.50 (1.23)
4. To what extent does coherence exist between the three curricula (Civic Education, Human Culture, and History) and each of the following:						
a. Geography?	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
b. Contemporary Problems?	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
c. Islamic Education?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. Civic Education?	50.0	33.3	0.0	16.7	0.0	4.17 (1.17)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient: (cont'd)						
b. Human Culture?	33.3	33.3	0.0	16.7	16.7	3.50 (1.64)
c. History?	50.0	33.3	0.0	16.7	0.0	4.17 (1.17)
6. To what extent do the three curricula (Civic Education, Human Culture and History) foster the following educational attitudes:						
a. direct reference to the original texts?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
b. encouragement of independent critical thinking?	16.7	0.0	50.0	33.3	0.0	3.00 (1.10)
c. satisfaction of applying knowledge to daily life situations?	0.0	16.7	33.3	33.3	16.7	2.50 (1.05)
d. application of scientific and historic method in research and thinking?	16.7	0.0	66.7	16.7	0.0	3.17 (0.98)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to achieve objectives?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
8. To what extent did the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
9. To what extent did learner's activities help develop the following attitudes:						
a. sound thinking?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
b. interpretation?	16.7	0.0	66.7	16.7	0.0	3.17 (0.98)
c. rationalization?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
d. analysis?	0.0	0.0	83.3	16.7	0.0	2.83 (0.41)
e. synthesizing?	0.0	0.0	83.3	16.7	0.0	2.83 (0.41)
f. forming opinions?	0.0	0.0	66.7	33.3	0.0	2.67 (0.52)
A - Grade 1 (Omani Society)						
10. To what extent was the Omani Curriculum successful in the following:						
a. presentation of general social concepts and methods of studying society as an introduction to the study of the Omani society?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
b. relating these concepts to social circumstances in the Sultanate of Oman?	16.7	0.0	83.3	0.0	0.0	3.33 (0.82)
c. emphasizing the functions of the family, family development and treatment of family problems?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
d. knowledge of habits, traditions and Omani values, and their particular characteristics?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent was the Omani Curriculum successful in the following: (cont'd)						
e. identifying Omani heritage such as castles, fortresses, towers, and the distinctive features of this heritage?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
f. knowledge of the ancient and modern activities of Omani people?	33.3	0.0	50.0	16.7	0.0	3.50 (1.23)
11. To what extent was the curriculum successful in developing in students the following attitudes:						
a. acquisition of positive and practical viewpoints on social development?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
b. identifying social organizations in Oman, the function of each, and the mutual relationships among them?	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
c. providing student with Omani culture?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
d. taking pride in the nation, identifying with it, and being loyal to it?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
e. instilling characteristics of good citizenship?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
f. recognizing the great achievements of the present era?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
g. acquisition of the skill of reading numbers, drawing charts, and figures?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
12. To what extent did curriculum contribute to presenting an overall view of the following:						
a. development in the Sultanate of Oman?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
b. role of oil sector?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
c. role of economic organizations and banks in utilizing Omani economic life?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
Grade 2 (Arab Society)						
13. To what extent was the Arab Society curriculum successful in realizing the following:						
a. illustrating the importance of the country's location and its effect on Arab Society?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
b. identifying problems and challenges caused by location?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
c. defining Arabic culture and identifying its characteristics and constancy?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
d. formation of attitudes and values that can help student's acquisition of sound habits and various skills?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
e. perceiving factors of Arab Unity and consistence?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
f. benefit from Quranic Surahs and the Prophet Hadith which emphasize the interrelationship between the Arabic and Islamic World?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent was the Arab Society curriculum successful in realizing the following: (cont'd)						
g. instilling pride and loyalty to Arab country and Arabic culture in students?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
h. identifying demographic characteristics of people in the Arab countries?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
14. To what extent did the curriculum contribute to the realization of the following:						
a. recognization of the efforts of Arab and international organizations in the realm of investigating the population status in the Arab World?	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
b. dependence on extra-curricular activities and cooperative and environmental projects as a method for research and thinking?	0.0	0.0	66.7	33.3	0.0	2.67 (0.52)
c. illustrating the special features and activities of the economic structure of the Arab World?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
d. identifying present and future directions of national economy?	16.7	0.0	83.3	0.0	0.0	3.33 (0.82)
e. identifying present and future directions of family and social structure?	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
f. realizing educational and health services in the Arab World?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
g. knowledge of the efforts of the Arab League in the scope of education?	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
h. knowledge of the efforts of the United Nations in the scope of education?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
i. developing in students the skills of data and graph analysis and deducing inferences?	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
15. To what extent do activities mentioned at the end of each chapter contribute to complementing the process of learning this curriculum concerning the study of society?	0.0	50.0	16.7	33.3	0.0	3.17 (0.98)
16. To what extent were diagrams and drawings mentioned in the textbook successful in supplementing and clarifying the ambiguous parts?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
C. Grade 3 - (Art Section)						
Contemporary Islamic World						
17. To what extent does the curriculum Contemporary Islamic World contribute to the realization of the following:						
a. defining the concepts of culture and civilization and the relationship between Islam and civilization?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent does the curriculu Contemporary Islamic World contribute to the realization of the following:						
b. deducting particular features of Islamic Culture from consideration of mentioned information and definitions?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
c. dependence on Quranic Texts and Prophet's Hadith when presenting the material and when emphasizing its information and concepts?	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
d. defining concepts related to basic elements of Islamic civilization?	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
e. developing positive attitudes towards Islamic systems?	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
f. illustrating common cultural features of the people that form the Islamic Nation?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
g. presenting some famous cultural figures in Oman and the Islamic World?	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
h. presenting some non-Arab Islamic states?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
i. defining the conditions of Islamic minorities in various countries of the world?	16.7	66.7	0.0	16.7	0.0	3.83 (0.98)
j. developing loyalty and identifying with the Islamic Nation?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
18. To what extent does the curriculum contribute to the realization of the following:						
a. presenting the Organization of the Islamic Conference, its objectives and the most important achievements of its efforts?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
b. illustrating the importance of Jerusalem in the Islamic World?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
c. illustrating the importance of the Islamic World in relation to its location, place, and cultural depth?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
d. future of Muslim and Islam in the Islamic World?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
e. illustrating the Islamic ideology of the Universe, Man, and Life and its reflection of the Islamic philosophy of education?	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
19. To what extent do the activities included in the Civic Education Curriculum contribute to continuity and to integration as part of the total learning process?	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Chemistry
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent does Omani Curriculum achieve integration between Chemistry and other subject-matters:						
a. Chemistry and Physics?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
b. Chemistry and Biology?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
c. Chemistry and Mathematics?	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
2. Modern Chemistry curricula adopt "laboratory experiments" as a method of achieving the objectives of the subject. To what extent does the Omani curriculum provide adequate opportunities for the achievement of the following:						
a. students' participation in demonstration experiments?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
b. students' participation in experimental activities which include:						
1. planning for the experiment?	0.0	0.0	33.3	66.7	0.0	2.33 (0.52)
2. preparation of equipment, materials, and preparation and installation of apparatus?	0.0	16.7	33.3	50.0	0.0	2.67 (0.82)
3. accurate observation of progress of experiments?	16.7	16.7	33.3	33.3	0.0	3.17 (1.17)
4. development of the habit of qualitative and quantitative recording of observations?	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
5. ability to construct and interpret curves?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
6. result analysis and conclusions?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
7. comprehensive report writing?	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
c. The curriculum inclusion of sufficient number of experiments to realize laboratory objectives?	0.0	66.7	16.7	0.0	16.7	3.33 (1.21)
d. emphasis of curriculum on the use of a special lab-workbook?	0.0	33.3	33.3	16.7	16.7	2.83 (1.17)
e. curriculum emphasis on provision of necessary educational materials such as: apparatus, chemicals, etc.?	0.0	66.7	16.7	0.0	16.7	3.33 (1.21)
f. allocation of specific weekly hours for experimental laboratory work?	0.0	16.7	33.3	33.3	16.7	2.50 (1.05)
g. provision of sufficient weight for experimental activities when evaluating the students?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
3. A list of objectives are included in the Secondary Chemistry Curriculum. To what degree do you feel that the curriculum content succeeded in achieving the following objectives:						
a. development of basic scientific concepts that help students understand and adapt to chemical phenomena in their environment?	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
3. A list of objectives are included in the Secondary Chemistry Curriculum. To what degree do you feel that the curriculum content succeeded in achieving the following objectives:						
b. students acquisition of information and skills that will qualify them to continue their higher education studies in different scientific fields?	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
c. understanding the role of Chemistry in exploiting natural resources and available energy resources to increase national income and to raise the standard of living?	0.0	0.0	83.3	16.7	0.0	2.83 (0.41)
d. identifying causes and dangers of environmental - pollution by chemical and radioactive materials and identifying preventive means?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
e. acquisition of the following skills:						
1. manipulation and maintenance of apparatus and laboratory equipment?	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
2. utilization of mathematical procedures to deduce laws and relations and apply them?	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
3. utilization of multi-sources of information, such as: references - trips - seminars, etc.?	0.0	0.0	50.0	50.0	0.0	2.50 (0.55)
4. interpretation of partial events and inter relating them to arrive to general principles and laws?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
5. application of laws and general principles to solve problems and interpret chemical phenomena?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
f. students' acquisition of the Scientific thinking through continuous application of theoretical and practical chemistry topics during their study?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
g. reinforcement of scientific attitude characterized by the following aspects:						
1. inference of events to their actual causes?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
2. adoption of experimental method to test hypothesis?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
3. no steadfastness to an opinion, but modifying it in light of new facts?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
h. ensuring the belief in the Almighty Creator through studying His Laws in creation that show His Ability, Creativeness, Control, Neatness, Coherence and Beauty?	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
4. Some concepts are repeated in Physics and Chemistry. To what extent do you agree with the necessity of repetitive study of these concepts:						
a. laws of gases and kinetic theory of gases?	16.7	0.0	33.3	50.0	0.0	2.83 (1.17)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
4. Some concepts are repeated in Physics and Chemistry. To what extent do you agree with the necessity of repetitive study of these concepts:						
b. development of atomic model?	16.7	16.7	33.3	33.3	0.0	3.17 (1.17)
c. radioactivity?	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
d. electrical nature of matter, and Faraday's laws of electr-chemical analysis?	16.7	16.7	33.3	33.3	0.0	3.17 (1.17)
5. Chemistry Curriculum uses measuring units from different systems of units. To what degree do you see the following uses are necessary:						
a. employment of a variety of systems of units?	0.0	16.7	16.7	50.0	16.7	2.33 (1.03)
b. limit to the employment of (SI) units?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
6. You have applied Chemistry Curriculum at the Secondary Level. To what extent do you agree on the soundness of the following statements:						
a. secondary curriculum content is a natural consequence of Preparatory Science Curriculum?	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
b. curriculum content is appropriate to the intellectual level of average students?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
c. time allocated for curriculum completion is appropriate for theoretical and experimental topics?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
d. curriculum topics are categorized at logical consequence?	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
e. curriculum achievement of basic Chemistry concepts in a hierarchical order of classes, such concepts are:						
1. development of atomic model?	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
2. electrical nature of elementary particles of matter?	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
3. quantitative chemical calculations?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
4. periodicity in elements characteristics?	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
5. chemical equation as an expression of reaction and its dynamics?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
7. The following are some basic concepts in Secondary Level Curriculum:						
First: Grade 1 Secondary						
Unit 1: Procedure of Scientific Research in Chemistry:						
Descriptive study in the scientific method (objective-law-theory). To what degree do you feel that the topic is:						
1. appropriate for Grade 1 Secondary?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
2. must be moved to a higher grade?	0.0	16.7	16.7	33.3	33.3	2.17 (1.17)
3. must be deleted from Secondary Level?	16.7	0.0	16.7	16.7	50.0	2.17 (1.60)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Units 2, 3, and 4: Structure of matter as atoms and molecules:						
The Scientific Model - Gas Laws - Elements and Compounds - Mole - Formulae - Laws of Chemical Combination - Gas Laws - Kinetic Theory - Avagadro's Hypothesis:						
a. To what degree do you feel that the content of these units should:						
1. realize units' objectives (structure of matter as atoms and molecules)?	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
2. logical consequences in topics is considered?	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
3. historical consequence in Chemistry is considered?	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
4. provides sufficient opportunity for training in writing a balanced chemical equation?	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
b. To what degree do you see that the Mole concept:						
1. is appropriate to the cognitive ability of the average student?	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
2. provides sufficient opportunity to employ it in chemical calculations?	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
Unit 7: Modern Periodic Table						
To what degree do you feel that this topic is:						
1. appropriate to the average student in this class?	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
2. crowded with sub-concepts that could be deleted from this class?	0.0	16.7	33.3	33.3	16.7	2.50 (1.05)
Second: Grade 2 (Science Section)						
Unit 1: Atomic structure and Periodic Table:						
a. To what degree do you feel that the following topics need more details and depth:						
1. electro-magnetic spectrum?	0.0	50.0	0.0	33.3	16.7	2.83 (1.33)
2. photones (Bet. Einstein and Max Blank)?	0.0	33.3	16.7	33.3	16.7	2.67 (1.21)
3. Balmer series?	0.0	33.3	16.7	33.3	16.7	2.67 (1.21)
Unit 2: Chemical Bonds and Molecular Structure						
A group of concepts are included in this unit. Some may be moved as they belong to, or are proper to subjects in Grade 3 Secondary. To what degree do you agree that the following concepts should be transferred to Grade 3 Secondary:						
1. double and triple bonds in organic compounds?	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
2. application using ethylene, acetylene, and ethylene diamine?	0.0	66.7	0.0	33.3	0.0	3.33 (1.03)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
A group of concepts are included in this unit. Some may be moved as they belong to, or are proper to subjects in Grade 3 Secondary. To what degree do you agree that the following concepts should be transferred to Grade 3 Secondary: (cont'd)						
3. hybridization and geometric forms of molecules?	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
4. isomerism and geometrical molecular structure?	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
Units: 3, 4, 5, and 6						
a. To what degree do you feel that the following concepts are appropriate to the standard of the student at Grade 2 Secondary Scientific:						
1. heat of formation and heat of reaction?	83.3	16.7	0.0	0.0	0.0	4.83 (0.41)
2. application of Le-Chatelier principle?	83.3	16.7	0.0	0.0	0.0	4.83 (0.41)
3. chemical calculations by Mole method?	83.3	16.7	0.0	0.0	0.0	4.83 (0.41)
b. To what degree do you feel that the curriculum of Grade 2 Secondary Scientific provides:						
1. sufficient opportunity to carry out appropriate experiments?	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
2. sufficient opportunity for training on writing chemical equations?	0.0	0.0	33.3	66.7	0.0	2.33 (0.52)
3. adequate emphasis on relating curriculum concepts to economic activities and natural resources of Oman?	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Third: Grade 3 (Science Section)						
Units: 1 and 2: acids, basics, oxidation and reduction						
In light of having taught these two units, to what degree do you see that the following are sound:						
1. the curriculum should give appropriate attention to the processes of volumetric analysis?	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
2. necessity of relating different indicators with the sensitivity of each to Hydrogen ion power (pH) value?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
3. clear illustration of the concept of "oxidation number"?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
4. most students can balance oxidation reduction reactions equations?	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
5. most students can apply oxidation reduction concepts in several aspects?	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Unit 3: Organic Compounds						
1. to what degree do you see that the content of this unit is sufficient at this stage?	16.7	33.3	33.3	33.3	0.0	3.50 (1.05)
2. organic compound must be started at:						
a. Grade 2 Secondary?	50.0	16.7	0.0	33.3	0.0	3.83 (1.47)
b. end of preparatory level?	33.3	16.7	16.7	16.7	16.7	3.33 (1.63)
3. to what degree do you see that chemical characteristics, reaction processes, methods of identification of compounds, must be added, and are not satisfied by the present teaching of physical characteristics?	33.3	50.0	0.0	0.0	16.7	3.83 (1.47)
4. To what extent the identification of basic elements in organic compounds, differentiation between Alyphatic and Aromatic compounds, must be added?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Unit 4: Biochemistry						
a. To what extent do you agree that it is better to add the following topics:						
1. hydro-analysis of starch?	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
2. effects of saturated fats on man's health?	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
3. notation on synthetization of some hormones and vitamins, and some of their benefits to man?	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
b. To what degree do you see that the following topics be deleted:						
1. complicated structural formulae of starch and cellulose?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
2. complicated structural formulae of vitamins and industrial detergents?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
Units 5 and 6: Study of Some Periods and Groups of the Periodic Table						
To what degree do you agree on the context of the following statements:						
1. it is preferable to forward to these units by transferring the following topics from Grade 2: factors affecting the chemical activity of elements?	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
2. it is preferable to emphasize, after studying the general characteristics, the characteristics of one of the elements of the group or small number of the elements of the period?	66.7	33.3	0.0	0.0	0.0	4.67 (0.52)
3. it is preferable to give more details (illustrations) on the following topics:						
a. extraction of known metals from their ores?	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
b. desalination of sea-water and treatment of hard-water?	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
To what degree do you agree on the context of the following statements: (cont'd)						
4. To what degree do you see that more attention should be given to the topic of detection and identification of normal common basic and acidic ions?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
5. To what degree do you feel that more attention should be given to differentiation between complex ions and double salts (practically)?	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
Unit 7: Radioactivity						
To what extent do you agree with the context of the following sentences:						
1. it is better to employ (SI) units instead of the c.g.s. system of units?	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
2. it is preferable to add to the curriculum these topics: "hazards of radioactive radiations, critical and permissible doses, protection from radiation?"	83.3	16.7	0.0	0.0	0.0	4.83 (0.41)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Part II Section A: Part 2
Curriculum Content: Physics
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were the long-term objectives considered when selecting and organizing Physics Curriculum content for Secondary Level?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent are the number of weekly hours allocated for teaching Physics Curriculum sufficient to achieve the objectives of the curriculum namely - theoretical knowledge and experimental skills - for the following classes:						
a. Grade 1 (2 weekly hours)?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
b. Grade 2 (4 weekly hours)?	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
c. Grade 3 (4 weekly hours)?	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
3. To what extent does Physics Curriculum encourage students to participate in scientific activities, such as: Science Club, contests, scientific fairs?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
4. To what extent are integration and progression achieved in Physics Curriculum content for the three classes of the Secondary level?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
5. To what extent is continuity realized between Science Curricula for Primary and Preparatory levels and Physics Curricula for Secondary Level?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
6. To what extent is integration realized between Physics Curriculum at the Secondary level and the curricula of other subject-matters, as follows:						
a. Physics and Chemistry?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
b. Physics and Mathematics?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
c. Physics and Biology?	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
7. To what extent does the curriculum content and methodology encourage students to understand Physics as a systematic structure of knowledge methodology, and way of thinking?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
8. To what extent do experimental and field studies according to Omani curriculum:						
a. form a complementary part of Physics Curriculum?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
b. represent a basic part in teaching methods of Physics?	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
9. To what extent does the Physics Curriculum help students to develop basic attitudes and habits of critical thinking such as:						
a. suspended judgement?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
9. To what extent does the Physics Curriculum help students to develop basic attitudes and habits of critical thinking such as: (cont'd)						
b. testing the extent of correct data?	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
c. employment of variety of information-sources?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
10. To what extent does the Physics Curriculum help students to develop the skills of logical thinking and the use of this method of thinking in relation to:						
a. deduction: employment and application of a general principle to specific cases and examples?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
b. induction: deducing a general principle from the anlysis, examplification, and studying of specific cases?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
11. Included in Physics curriculum are a list of objectives that the curriculum tries to achieve. To what degree do you feel as a result of implementation of the curriculum that it has succeeded in realizing the following objectives:						
a. providing students with sufficient scientific and functional knowledge to enable him to adapt to scientific and techological development?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
b. acquisition of the following skills:						
1. performing experiments, manipulation of laboratory equipment and apparatus, and carrying out accurate measurements?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
2. interpretation and drawing of curves and their application to understand relations between variables for a particular phenomenon?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
3. expressing Physics relationships in mathematical forms and application of theories and laws in solving problems in Physics?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
c. developing sound scientific norms and attitudes in students, such as:						
1. intellectual objectivity and respect for others opinions?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
2. science reading habit, scientific inquisitiveness, and the perception that scientific knowledge is not final, but can be modified?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
3. scientific honesty, self-trust and dependence?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
4. cooperation and valuing group work?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
c. developing sound scientific norms and attitudes in students, such as: (cont'd)						
5. development of student ability to solve problems by the following methodology: problem identification, data collection, hypothesis construction, testing of hypothesis, conclusion of appropriate relations or solution, and then application of these relations to similar cases?	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
12. Physics Curriculum in the Secondary Level grades consists of a number of independent units. To what degree do you feel that this approach in organizing subject matter material supplies the student with a sufficient degree of scientific knowledge in Physics?	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
13. To what degree do you feel that Physics Curriculum in each of the secondary grades is appropriate for the students' cognitive maturity relevant to:						
a. amount of scientific knowledge?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
b. level of topic treatment?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
c. time allocated to study Physics in each grade?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
d. cognitive skills necessary to comprehend and understand scientific knowledge inculcated in the curriculum?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
14. To what extent is balance achieved among parts of the Physics Curriculum content material so that it is a systematic and coherent fiber of knowledge?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
15. To what degree do you see curriculum coverage of Geometrical Optics (reflection and refraction laws, lenses, optical systems and computations) is sufficient?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
16. To what degree do you see that curriculum coverage of main concepts of heat (heat transfer, expansion by heat, calorimetry) is sufficient?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
17. To what extent do you agree wiith repeating some concepts in Physics and Chemistry Curricula at the Secondary level such as:						
a. laws of gases?	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
b. kinetic theory of gases?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
c. development of atomic model?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
d. radio-activity and the structure of the nucleus?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
18. To what degree do you feel that the curriculum content has sufficiently covered each of its units:						

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
First: Grade 1 Secondary						
a. Unit 1: Physics and Measurement						
1. To what extent did the unit cover basic concepts of measurements, fundamental and derived units of physical quantities?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
2. To what extent are concepts of vector product of two vectors and scalor product of two vectors illustrated?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
3. To what extent is the unit concerned with developing basic skills of measurement, the correlation between errors, accuracy of measurement and significant figures?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
4. To what extent does the curriculum assure the continuous application of already presented concepts as application of SI units?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
b. Unit 2: Motion, Force, and Work						
1. To what extent are basic concepts of motion, force, word, power, energy, and energy transformations illustrated?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent was mathematical treatment of momentum and its relations to Newton's second law, illustrated?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
3. To what extent does the unit cover experimental and practical work necessary to develop student's skills of measuring time and calculating velocity and acceleration and emphasize the basic concepts and mathematical expressions of motion, work, and power?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
c. Unit 3: Liquids						
1. To what extent are the concepts of pressure distribution in hydrostatics and its application to derive the upthrust and Archimedes principle illustrated?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent were the following concepts illustrated: Motion of Liquids, Flow lines, Flow pipe uplifting force, coefficient of viscosity in dynamic liquids and mathematical expressions relating these quantities to each other?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
3. To what extent are laboratory experiments supporting concepts of this unit sufficient?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Second: Grade 2 Secondary						
a. Unit 1: Laws of Conservation of Mass and Energy.						
1. To what extent does the unit emphasize the following concepts: Closed system, Energy transformations, conservation of linear and angular momentum, and energy-mass equivalence?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent are illustrations made in the mathematical treatment of: elastic and inelastic collision, coefficient of buoyance, inertia and laws of conservation?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
3. To what extent are laboratory experiments sufficient to support student comprehension of these concepts?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
b. Unit 2: Heat and Thermodynamics.						
1. To what extent are the following basic concepts illustrated: Kinetic Theory of Gases - gas laws and ideal gas, isothermal, adiabatic and isobaric gas processes, Second Law of Thermodynamics?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
2. To what extent are mathematical treatments of Kinetic theory of gases and pressure of Ideal Gas fully illustrated?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
3. To what extent are laboratory experiments sufficient to support these concepts to students?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
c. Unit 3: Wave Nature.						
1. To what extent does the curriculum cover the concepts of wave - motion and its structure as a means of transfer of energy?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent are basic concepts of physical optics (interference and diffraction) fully illustrated?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
3. To what extent are laboratory experiment in the curriculum sufficient to support these concepts to students?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Third: Grade 3 Secondary						
a. Unit 1: Fields and Forces.						
1. To what extent are basic concepts such as: electric field, electric flux, electric potential, magnetic field, Ohm's law, Kirchov's laws and electromagnetic induction illustrated?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
a. Unit 1: Fields and Forces.						
2. To what extent is there a clear illustration for the correlation between concepts of different fields (electric, magnetic and gravity), and the forces resulting from these fields?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
3. To what extent is there a clear illustration for the correlation between mathematical expressions for field intensity, force, and potential energy of these fields?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
4. To what extent are laboratory and practical experiments sufficient to support these concepts to students?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
b. Unit 2: Structure of the Atom and Modern Quantum Theory.						
1. To what extent does this unit add to the concepts previously studied by the student in Chemistry Curriculum of Grade 2 Secondary?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
2. To what extent are other basic concepts clearly illustrated such as: atomic spectra and their relation to atomic structure modern quantum theory, de Broglie Waves and electron diffraction, Heizenberg uncertainty principle, and Paulie exclusion principle?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
3. To what extent are laboratory work and practical experiments sufficient to support student comprehension of these concepts?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
d. Unit 3: Atomic Nucleus and Radioactivity.						
1. To what extent was new content added in this unit supplementing the concepts already included in Chemistry?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent is there a clear illustration of the correlation between nuclear field and other fields previously studied in Unit 1?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
3. To what extent were the following concepts illustrated: nuclear binding energy, nuclear potential, binding energy curve, and energy of nuclear fission and fusion?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
4. To what extent are laboratory work and practical experiments insufficient to illustrate and re-inforce student comprehension of basic concepts in this Unit?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Biology
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent were long-term objectives for education in Oman in general and at secondary level in particular considered when selecting and organizing curriculum content of the Biology Curriculum?	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
2. To what degree do you consider time allocated in the school schedule for biology adequate to achieve the objectives of this curriculum including knowledge structure and skill development in the following classes:						
a. Grade 1 (2 weekly hours)?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
b. Grade 2 (3 weekly hours)?	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
c. Grade 3 (3 weekly hours)?	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
3. To what extent did the curriculum emphasize the viewpoints of and illustrate coherence between Islam and scientific theories on creation and evolution issues in such a manner that confusion and doubt were eliminated from the mind of the learner?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
4. To what extent are integration and continuity illustrated in expanding and deepening biological and environmental concepts in the Biology Curriculum for Grade 1 through Grade 3 Secondary?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
5. To what extent are balance in quantity and method of treatment and strength illustrated in each of the biology topics at the secondary level?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
6. To what extent do you see topic sequence in the Biology Curriculum for Grade 1 Secondary is the correct sequence considering the following aspects:						
a. logical sequence of topics and graduation of difficulty and depth?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
b. students' interest satisfaction and their physical and intellectual maturity in response to their normal questions at the appropriate time?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
7. To what extent does the Biology Curriculum for secondary grades encourage students to enroll in some scientific activities and biology-oriented societies such as: environmental conservation groups, preservation and animals groups, and other groups?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
8. To what extent does the Biology Curriculum for secondary grades encourage inquisitiveness, experimental and field studies, and study of Omani botany and zoology as extra-curricular activity and a self-learning method?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
9. To what extent does the Biology Curriculum help students understand that biology is a system structure of knowledge, as well as a method of research, thinking, and studying?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
10. To what extent does the Biology Curriculum help students develop such attitudes and basic thinking habits as the following:						
a. postponing judgement?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
b. testing the accuracy of data?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
c. evaluating data sources?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
d. utilizing varied information sources?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
11. To what extent does the Biology Curriculum help students develop such attitudes and basic logical thinking habits as the following:						
a. deduction: employment and application of general principle to group of examples and specific cases?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
b. induction: inference of a general principle or law from the analysis and study of group of examples and particular cases?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
12. To what extent does the Biology Curriculum help students develop the ability to form basic scientific concepts through:						
a. study and analysis of observation and results collected from a variety of living things?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
b. assimilating common factors among groups of these species in order to arrive at generalized concepts about: birds, reptiles, vertebrated animals, etc.?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
13. To what extent does the Biology Curriculum help students utilize the solving method for specific problems related to environmental studies and human health through the following:						
a. awakening consciousness and problem sensing?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
b. studying scope and phenomenon of the problem and gathering information about it?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
c. information analysis in order to arrive at the real causes of the problem?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
d. hypothesizing a group of solutions?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent does the Biology Curriculum help students utilize the solving method for specific problems related to environmental studies and human health through the following:						
e. testing each hypothesis and application possibility?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
f. arriving at most appropriate solution and presenting a strategy for implementation?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
g. group discussion and follow-up on problem solving?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
14. To what extent does the Biology Curriculum for secondary grades help students gain psychomotor and cognitive skills necessary to study science and biology in particular through:						
a. familiarization with apparatus and equipment and methods of operation and maintenance?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
b. generalized experiments to study a phenomenon or a specific problem?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
c. conducting experiments?	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
d. collecting data and classifying it in such a way as to simplify study and analysis?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
e. representing the data graphically?	25.0	0.0	25.0	50.0	0.0	3.00 (1.41)
f. presenting the data in the form of accurate scientific reports illustrated by drawings and figures?	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
15. To what degree do you feel that experimental and field studies represented in the Omani Biology Curriculum are:						
a. an integrative and important part of the Biology Curriculum?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
b. a basic part of the teaching method in biology?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
c. a basic part for evaluating students in this subject-matter?	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
16. To what extent does studying the Omani Biology Curriculum lead to illustrating the mystery of creation and the universe and to developing man's appreciation of The Creator's Absolute Greatness in this universe's creation, organization, and protection of natural balance of the planet earth?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
17. To what extent does Omani Biology Curriculum contribute to familiarizing the student with natural resources in his environment, environmental dangers, sound exploitation of resources, and environment conservation?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
18. To what extent is integration accomplished between the Biology Curriculum and the other Science Curricula at the secondary level:						
a. Biology and Chemistry?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
b. Biology and Physics?	0.0	25.0	25.0	50.0	0.0	2.75 (0.96)
c. Biology and Mathematics?	25.0	0.0	0.0	25.0	50.0	2.25 (1.89)
d. Biology and Social Studies?	25.0	0.0	25.0	0.0	50.0	2.50 (1.92)
19. A list of objectives to be achieved is included in the Biology Curriculum. To what degree do you feel that during your implementation of the curriculum. The curriculum realized the following objectives:						
a. developing the student's interest in his natural environment?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
b. developing the student's consciousness of general health principles and how to conserve his body?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
c. not accepting myths concerning health and disease issues, but determining cause and effect cases?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
d. adopting experimental method as a means of confirming the student's environmental knowledge?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
e. adopting scientific thinking methodology in solving his problems as an individual and also in studying and suggesting solutions to social problems?	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
f. independence in thinking and not being guided by other people's opinions except after revision and conviction of their truth?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
g. cooperation in work and research to study environmental problems and related social problems?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena:						
Unit 1:						
a. health and disease?	0.0	25.0	0.0	25.0	50.0	2.00 (1.41)
Unit 2:						
a. earth layers - earth crust - earth sphere?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
b. rocks and soil?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
c. factors leading to earth's surface topography?	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
d. aerosphere?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
e. man's biological environment?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
f. geologic eras?	25.0	25.0	0.0	50.0	0.0	3.25 (1.50)
Unit 3:						
a. the living organism?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
b. organic and inorganic compounds?	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
c. living matter?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
d. protoplasm?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
e. protozoa?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
f. autotrophs & heterotrophs?	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
g. incidental creation?	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
h. theory and fact and the difference between them cohering change?	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
i. concept of creation in the Qura'n?	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Unit 4:						
a. variations in living organisms (form and function)?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
b. adaptation?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
c. natural selection?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
d. mutation?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
e. evolution of living organisms?	50.0	0.0	25.0	25.0	0.0	3.75 (1.50)
f. classification?	50.0	0.0	25.0	25.0	0.0	3.75 (1.50)
g. species?	50.0	0.0	25.0	25.0	0.0	3.75 (1.50)
h. scientific name for the living organisms?	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
i. four kingdoms of living organisms?	50.0	0.0	25.0	25.0	0.0	3.75 (1.50)
j. classification basis and method of choice?	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
Unit 5:						
a. micro-organisms?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
b. viruses?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
c. bacteria?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
d. algae?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
e. fungi?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
f. bread molds?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
g. metaphyta & monera?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
h. vertebrates and invertebrates?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
i. classification of vertebrates and invertebrates?	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Unit 6:						
a. what is an Ecosystem?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
b. several Ecosystems, and their classification?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
Second: Grade 2 Secondary						
Unit 1:						
a. living cell?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
b. structure of the living cell and particular functions?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
c. cell material?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
d. carbohydrates?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
e. proteins?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
f. fats?	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
g. nucleic acids?	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
h. protoplasm?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
i. types of solutions?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
j. ionic and non-ionic substances?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
k. concept of diffusion and permeability in living cells?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
l. osmosis and osmotic pressure?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
m. plasmolysis and turgor and their relation to osmosis?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
n. photosynthesis?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
o. aerobic and anaerobic respiration?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
p. metabolism in living organisms?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
q. cellular fission and mitoses?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Unit 2:						
a. functional specialization in the cells of living organisms?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
b. variation of structure of cells according to function?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
c. kinds of plant tissues?	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
d. kinds of animal tissues?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Unit 3:						
a. concept of system in the specialized living organism?	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
b. photosynthesis systems - pors system?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
c. elements necessary for photosynthesis?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
d. transpiration through stomata?	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
e. concept of photo-parameters?	50.0	25.0	0.0	25.0	0.0	4.00 (1.41)
f. electronic activation?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
g. atmospheric carbon fixation?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
h. concept of digestion and the digestive system?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
i. catabolism and anabolism?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
j. concept of (transport) in the body of the living organism?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
k. transport in plants?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
l. transport in animals?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
m. circulatory system - open and closed circulatory systems?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
n. circulatory system in man?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
o. the blood - blood coagulation?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
p. lymph - lymphatic system?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
q. excretion - excretory system?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
r. excretory system in plants?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
s. variety of excretory methods and systems in animals?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
t. support in plant and animals?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
u. skeleton (skeletal system) in animals?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
v. exoskeletal system?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
w. endoskeletal system?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
x. skeleton in man?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Third: Grade 3 Secondary						
Unit 1:						
a. movement in living organisms?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
b. muscular system?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
c. variation of types and methods of motion in living organisms?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
d. specialization in muscular tissues?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
e. concept of coherent functions in specialized living organisms?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
f. concept of sensation?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
g. concept of nervous system?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
h. neuro-muscular coherence?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
i. mechanical varieties of neuro-muscular coherence in living organisms?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
j. types of nervous cells?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
k. nerve impulse?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
l. polarization?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
m. central nervous system?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
n. peripheral nervous system?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
o. variation nerve impulse according to different sense organs?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
p. hormones?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
q. auxins responsible for growth in plants?	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
r. phototropism & geotropism?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
s. flower hormones?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
t. hormonic organization in animals?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
u. hormone excreting glands, their types, and the type of hormones they excrete?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
v. neuro - hormonic coherence?	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
w. sexual and asexual reproduction?	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
x. varied forms of sexual and asexual reproduction in living organisms?	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
y. male and female gametogenesis and method of their formation?	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
z. meiosis?	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
aa. fertilization?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response[a] 5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
bb. various forms of sexual reproduction in living organisms?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
cc. reproduction in man and the human reproductive systems?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Unit 2:						
a. concept of homeostasis?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
b. Concept of digestion and its relation to homeostasis?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
c. concept of respiration and its relation to homeostasis?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
d. concept of excretion and its relation to homeostasis?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
e. body temperature regulation and the role of skin and circulatory system?	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
f. role of hormones in homeostasis?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
g. role of nervous system in homeostasis?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Unit 3:						
a. concept of genetics?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
b. concept of heredity?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
c. Mendel's law?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
d. chromosomes carrrying hereditary characteristics?	50.0	0.0	50.0	0.0	0.0	4.00 (1.16)
e. hereditary basis are chemical?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
f. D.N.A.?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
g. heredity code?	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
h. genes and the carrying of heredity characteristics?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
i. genetic mutation?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
j. complete and inncomplete dominance?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
k. genetic reactions?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
l. case of incomplete dominance?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
m. fatal factors?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
n. multiplicative factors?	75.0	0.0	25.0	0.0	0.0	4.50 (1.00)
o. sexual chromosomes and birth control?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
p. varied forms and variation of species affected characteristics in animals?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
q. some genetic diseases?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
r. varieties of genetic diseases?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
s. inherited predisposition certain diseases?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
t. improve reproduction through genetic engineering?	50.0	25.0	0.0	25.0	0.0	4.00 (1.41)
Unit 4:						
a. concept of ecology?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
b. factors affecting environment?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
c. atmospheric factors (light - intensity of light - light duration - heat and humidity - gases and winds)?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)

[a] Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. A group of concepts are included in the Biology Curriculum. To what degree do you feel that during your application of the curriculum, it succeeded in helping students construct function-oriented concepts so that they were able to generalize them to other events and phenomena: (cont'd)						
d. location factors (altitude and latitude)?	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
e. soil factors?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
f. water factor?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
g. chemical factors?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
h. biological factors and natural and dynamic balance in ecological activities?	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
i. matter and energy cycle?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
j. gas-cycle (oxygen-carbon dioxide-nitrogen) in nature?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
k. water cycle in nature?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
l. food chain and food network?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
m. products and consumptions?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
n. food pyramid?	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
o. environmental pollution?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
21. To what degree do you feel that there is a clear intellectual error attached to Biology topics in each of the following classes:						
a. as for topics of Grade 1?	0.0	0.0	0.0	0.0	0.0	0.00 (0.00)
b. as for topics of Grade 2?	0.0	0.0	0.0	0.0	0.0	0.00 (0.00)
c. as for topics of Grade 3?	0.0	0.0	0.0	0.0	0.0	0.00 (0.00)
22. To what degree do you feel that concentrating on environment topics in Grade 1 and Grade 3 and not teaching them at Grade 2 is a good and desired division?	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
23. To what degree do you feel that it is better to study all environment topics as an integrated topic in one class?	0.0	75.0	0.0	0.0	25.0	3.25 (1.50)
24. To what degree do you feel that dividing the topic systems and biological functions between Grades 2 and 3 is a desired method?	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
25. To what degree have the suggested curriculum and teaching methods in teacher's manual given sufficient importance to student experimental study in biology?	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
26. To what extent are apparatus such as microscopes and dissection equipment available to allow every student to experiment by himself?	25.0	0.0	0.0	75.0	0.0	2.75 (1.50)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
27. To what extent are living organism species under study sufficiently available for demonstration and laboratory experimentation lessons so as to allow students to study by themselves?	25.0	0.0	25.0	50.0	0.0	3.00 (1.41)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section A: Part 2
Curriculum Content: Human Culture
(Supervisor)

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. The spiral curriculum approach has been used in designing the content of the Omani Human Culture Curriculum. This means that a group of concepts are treated at the Primary and Secondary Levels but with different scope (horizontal expansion) and depth (vertical expansion) at each of the levels. To what extent do you feel that the Human Culture Curriculum has been successful in expanding the scope and depth of concepts at the secondary level?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
2. To what extent do the curricula of Human Culture, Civic Education, and History realize the following:						
a. needs of student after graduation?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
b. Long-range educational objectives?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
c. integration with the topics of the preparatory and secondary levels?	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)
d. coherence among topics and logical sequence?	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)
e. emphasis on contemporary issues and current events?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
f. horizontal (parallel) integration among subjects - Human Culture, Civic Education, and History?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
3. There is emphasis when studying these subjects on the independent-learning method by students and its development. To what extent are these phenomena illustrated in the following:						
a. activities and experiences directed towards discovering facts, concepts, and relationships?	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
b. utilizing the environment as a source of learning?	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)
c. library reference work and field research?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
d. training in collection of information through scientific methods?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
e. using media as educational material?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
4. To what extent does coherence exist between the three curricula (Human Culture, Civic Education, and History) and each of the following:						
a. Geography?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
b. Contemporary Problems?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
c. Islamic Education?	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. To what extent are the weekly hours allocated for each of the following courses sufficient:						
a. History?	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
b. Civic Education?	33.3	0.0	0.0	33.3	33.3	2.67 (2.08)
c. Human Culture?	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
6. To what extent do the three curricula (History, Human Culture, and Civic Education) foster the following educational attitudes:						
a. direct reference to the original texts?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
b. encouragement of independent critical thinking?	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)
c. satisfaction of applying knowledge to daily life situations?	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)
d. application of scientific and historic method in research and thinking?	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
7. To what extent were the three curricula successful in considering individual and group differences - during activities - between students as individuals and as groups cooperating to achieve objectives?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
8. To what extent were the three curricula consider the needs, objectives, and different problems of the society? To what extent were solutions to these problems presented?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
9. To what extent did learner's activities help to develop the following attitudes:						
a. sound thinking?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
b. interpretation?	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)
c. rationalization?	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
d. analysis?	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)
e. synthesizing?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
f. forming opinions?	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)
10. To what extent is the content of the Human Culture Curriculum in accordance with the cognitive development of the secondary level student?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
11. To what degree is there integration between the Human Culture Curriculum for Grade II arts section with Grade III arts section?	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
12. To what extent did the Human Culture Curriculum for secondary level contribute to presenting a holistic (integrative) frame of Human Culture?	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
13. To what extent was the Human Culture Curriculum at the secondary level successful in evaluating human ideas, opinions, and thoughts by the standards of Islamic belief and values?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
14. To what extent was the Human Culture Curriculum successful in encouraging initiativeness, question presentation, and questioning in all intellectual situations?	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
15. To what extent was the Human Culture Curriculum successful in instilling in students an appreciation and respect for individual human differences?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
16. To what extent did the Human Culture Curriculum for Class II Secondary arts section realize the following:						
a. formation of integration of different aspects of philosophy?	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
b. formation of a holistic outlook in life as perceived by eminent Western philosophers?	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)
c. ascertain the creativeness of Islamic thought regardless of the effects of Greek philosophy?	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)
d. appreciation of the importance of philosophy in the development of human thought?	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
e. instilling in students the first idea of the meaning of life, the human struggle with universal problems, and attempts at finding solutions to them?	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
f. identifying the basis for values derived from Quran and Prophet's tradition?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
g. development and implementation of sound thinking, avoiding doubt and misgivings, and following the way that leads to the truth?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
h. developing a sense of appreciation for sound thinking methodologies?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
i. identifying some concepts and principles and specific research methodologies applied in some social sciences?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
j. assuring the practice of the student of some particular skills such as data collection, reference work, footnoting, and sources?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
k. instilling an appreciation of the importance of psychology in human life?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
l. recognizing and criticizing some facts and principles that govern aspects of human behavior?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
m. recognize and criticize new trends in the interpretation of human behavior?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
n. recognization and criticism of modern approaches -- interpretation of human self and personality?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. To what extent did the Human Culture Curriculum for Class II Secondary arts section realize the following: (cont'd)						
o. identifying clearly the relationship between the psychology of human personality and its environment?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
p. instilling appreciation of Islamic educators' contributions to educational psychology?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
q. providing enjoyment to the student through reading and discussion of selected texts written by great Islamic and Western Scholars?	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)
r. constructing mutual relationships among concepts present in the three units of the curriculum, namely philosophy, logic, and psychology units?	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
s. presenting philosophical thoughts suitable to the intellectual level of a Grade 2 Secondary Level student?	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)
t. introducing concepts in the logic unit suitable to the intellectual ability of the Grade 2 secondary level student of?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
u. presenting illustrative examples in the three units of curriculum?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
17. To what extent do you feel that the content of the Human Culture Curriculum for Grade III Secondary arts section has illustrated the following:						
a. identifying the causes of the Islamic people's in the 19th century and first half of the 20th century?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
b. identifying the most important active factors in the formation of modern Arabic thought?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
c. defining modern Arabic thought in the educational, scientific, and social aspects?	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
d. identifying contemporary Arab and Islamic leaders in the education, science and social disciplines?	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)
e. identifying contemporary Arab and Islamic intellectual scholars in the Sultanate Of Oman?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
f. comparing modern Arab thought with its counterpart in the 9th and 10th century A.D.?	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
g. presenting texts and excerpts as means of enabling the students to deduct direction of contemporary Arab thought?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
h. instilling an appreciation of intellectual efforts and struggle taken by eminent Arab-Muslim scholars?	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
i. optimistic view of the intellectual, scientific, and technological developments of Arabs in the future?	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIA2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. To what extent do you feel that the content of the Human Culture Curriculum for Grade III Secondary arts section has illustrated the following:						
j. Avoiding pitfalls of suspicions, illusions, mysticism, generalization, blind imitation and adherence to sound principles of research, inquiry, and invention?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
k. emphasizing integration among all Islamic Scholars even if their means differ?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
l. ascertaining the emphasis of the diffusion of the ideas of the Islamic Scholars to all Islamic countries incontrast to diffusion within one country only?	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section B: Part 1
Classroom Activities: Methods of Instruction
(Teacher)

Item IIB1 1: To what degree do your classroom procedures conform with the objectives of the course you teach?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	23.5	32.9	24.7	14.1	4.7	3.57	(1.14)
Arabic Language	22.4	48.3	21.6	6.9	0.9	3.85	(0.88)
English Language	9.6	50.4	29.6	7.8	2.6	3.57	(0.87)
Mathematics	10.1	58.7	24.8	5.5	0.9	3.72	(0.76)
Specialized Subject Matters in The Arts							
General Sciences	21.4	46.4	25.0	7.1	0.0	3.82	(0.86)
History	31.7	44.4	17.5	6.3	0.0	4.02	(0.87)
Geography	27.0	50.0	17.6	2.7	2.7	3.96	(0.90)
Civic Education	42.5	40.0	12.5	2.5	2.5	4.18	(0.93)
Specialized Subject Matters in The Sciences							
Chemistry	7.4	57.4	27.8	3.7	3.7	3.61	(0.83)
Physics	12.5	53.6	26.8	5.4	1.8	3.70	(0.83)
Biology	21.6	47.1	23.5	7.8	0.0	3.82	(0.87)
Human Culture	31.3	43.8	21.9	3.1	0.0	4.03	(0.82)

Item IIB1 2: To what extent do you use the different methods of instruction suggested in the curriculum to suit below average, average and superior students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	31.8	34.1	11.8	14.1	8.2	3.67	(1.29)
Arabic Language	27.4	38.1	23.0	10.6	0.9	3.81	(0.99)
English Language	10.3	52.1	31.6	6.0	0.0	3.67	(0.74)
Mathematics	17.1	47.6	25.7	7.6	1.9	3.71	(0.91)
Specialized Subject Matters in The Arts							
General Sciences	33.3	40.7	18.5	3.7	3.7	3.96	(1.02)
History	42.2	40.6	12.5	4.7	0.0	4.20	(0.84)
Geography	40.5	37.8	14.9	4.1	2.7	4.10	(0.98)
Civic Education	35.9	35.9	15.4	7.7	5.1	3.90	(1.14)
Specialized Subject Matters in The Sciences							
Chemistry	16.7	40.7	37.0	5.6	0.0	3.69	(0.82)
Physics	17.5	50.9	26.3	5.3	0.0	3.81	(0.79)
Biology	28.6	44.9	20.4	4.1	2.0	3.94	(0.92)
Human Culture	27.3	36.4	27.3	6.1	3.0	3.79	(1.02)

Item IIB1 3a: When teaching assignments are made, to what degree is consideration given to the academic background of the teachers?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	36.5	21.2	11.8	14.1	16.5	3.47	(1.51)
Arabic Language	47.0	30.4	10.4	3.5	8.7	4.04	(1.23)
English Language	13.0	38.3	32.2	12.2	4.3	3.44	(1.01)
Mathematics	36.0	35.1	17.1	3.6	8.1	3.87	(1.18)
Specialized Subject Matters in The Arts							
General Sciences	37.0	22.2	22.2	7.4	11.1	3.67	(1.36)
History	40.6	29.7	14.1	10.9	4.7	3.91	(1.19)
Geography	40.3	25.0	12.5	8.3	13.9	3.69	(1.43)
Civic Education	47.5	30.0	12.5	2.5	7.5	4.08	(1.19)
Specialized Subject Matters in The Sciences							
Chemistry	35.2	38.9	14.8	7.4	3.7	3.94	(1.07)
Physics	38.6	35.1	8.8	12.3	5.3	3.90	(1.21)
Biology	49.0	21.6	15.7	9.8	3.9	4.02	(1.19)
Human Culture	37.5	21.9	18.8	12.5	9.4	3.66	(1.36)

Item IIB1 3b: When teaching assignments are made, to what degree is consideration given to teaching experience?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	38.1	22.6	15.5	9.5	14.3	3.61	(1.44)
Arabic Language	47.8	28.7	10.4	5.2	7.8	4.04	(1.23)
English Language	9.6	43.5	37.4	7.0	2.6	3.50	(0.86)
Mathematics	43.6	30.9	9.1	7.3	9.1	3.93	(1.28)
Specialized Subjects Matters in The Arts							
General Sciences	35.7	17.9	17.9	17.9	10.7	3.50	(1.43)
History	42.9	19.0	14.3	15.9	7.9	3.73	(1.37)
Geography	37.8	29.7	12.2	10.8	9.5	3.76	(1.32)
Civic Education	43.2	16.2	21.6	2.7	16.2	3.68	(1.47)
Specialized Subject Matters in The Sciences							
Chemistry	29.6	44.4	14.8	9.3	1.9	3.91	(1.00)
Physics	41.1	30.4	14.3	7.1	7.1	3.91	(1.23)
Biology	40.0	28.0	20.0	6.0	6.0	3.90	(1.18)
Human Culture	45.5	9.1	24.2	15.2	6.1	3.73	(1.35)

Item IIB1 3c: When teaching assignments are made, to what degree is consideration given to the preference of the teachers?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	17.4	36.0	8.6	11.6	16.3	3.27	(1.33)
Arabic Language	42.6	21.7	16.5	8.7	10.4	3.77	(1.36)
English Language	5.4	34.8	36.6	18.8	4.5	3.18	(0.95)
Mathematics	37.6	33.0	14.7	8.3	6.4	3.87	(1.20)
Specialized Subject Matters in The Arts							
General Sciences	18.5	29.6	22.2	18.5	11.1	3.26	(1.29)
History	36.5	25.4	14.3	15.9	7.9	3.67	(1.33)
Geography	34.2	19.2	24.7	8.2	13.7	3.52	(1.40)
Civic Education	42.1	13.2	15.8	10.5	18.4	3.50	(1.57)
Specialized Subject Matters in The Sciences							
Chemistry	31.5	35.2	20.4	7.4	5.6	3.80	(1.14)
Physics	33.3	27.8	22.2	7.4	9.3	3.69	(1.27)
Biology	29.4	33.3	19.6	9.8	7.8	3.67	(1.23)
Human Culture	28.1	31.3	12.5	15.6	12.5	3.47	(1.39)

Item IIB1 4: To what degree do teachers' schedules include adequate time to make preparations for field and practical activities, as well as for classroom teaching?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	16.7	23.8	29.8	19.0	10.7	3.17	(1.23)
Arabic Language	12.3	21.9	19.3	24.6	21.9	2.78	(1.34)
English Language	2.7	27.7	31.3	24.1	14.3	2.80	(1.08)
Mathematics	6.4	22.9	20.2	25.7	24.8	2.61	(1.26)
Specialized Subject Matters in The Arts							
General Sciences	14.8	25.9	37.0	14.8	7.4	3.26	(1.13)
History	13.1	21.3	21.3	27.9	16.4	2.87	(1.30)
Geography	9.5	13.5	21.6	24.3	31.1	2.46	(1.32)
Civic Education	10.0	15.0	30.0	20.0	25.0	2.65	(1.29)
Specialized Subject Matters in The Sciences							
Chemistry	3.7	24.1	18.5	33.3	20.4	2.57	(1.18)
Physics	7.0	26.3	28.1	21.1	17.5	2.84	(1.21)
Biology	2.0	30.0	22.0	34.0	12.0	2.76	(1.08)
Human Culture	21.9	9.4	28.1	25.0	15.6	2.97	(1.38)

Item IIB1 5: To what extent does the school library (if any) include a good selection of professional books, periodicals, newsletters, or other currrent subject matter information?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	23.5	23.5	25.9	20.0	7.1	3.67	(1.24)
Arabic Language	25.7	21.2	23.0	15.9	14.2	3.28	(1.38)
English Language	4.4	12.4	23.9	24.8	34.5	2.27	(1.19)
Mathematics	7.5	18.9	27.4	22.6	23.6	2.64	(1.24)
Specialized Subject Matters in The Arts							
General Sciences	17.9	32.1	28.6	14.3	7.1	3.39	(1.17)
History	13.1	29.5	26.2	19.7	11.5	3.13	(1.22)
Geography	17.8	20.5	26.0	12.3	23.3	2.97	(1.41)
Civic Education	17.5	17.5	17.5	30.0	17.5	2.88	(1.38)
Specialized Subject Matters in The Sciences							
Chemistry	11.1	27.8	31.5	16.7	13.0	3.07	(1.20)
Physics	3.5	28.1	33.3	19.3	15.8	2.84	(1.12)
Biology	15.7	25.5	33.3	21.6	3.9	3.28	(1.10)
Human Culture	25.8	12.9	25.8	22.6	12.9	3.16	(1.39)

Item IIB1 6: To what degree are regular teacher meetings held to discuss problems of implementation and improvement of the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	17.7	27.8	27.8	20.3	6.3	3.30	(1.17)
Arabic Language	16.8	31.0	26.5	15.0	10.6	3.28	(1.22)
English Language	4.3	33.0	40.0	14.8	7.8	3.11	(0.98)
Mathematics	14.7	31.2	16.5	13.8	23.9	2.99	(1.42)
Specialized Subject Matters in The Arts							
General Sciences	21.4	14.3	32.1	25.0	7.1	3.18	(1.25)
History	18.8	20.3	26.6	14.1	20.3	3.03	(1.39)
Geography	16.2	18.9	18.9	21.6	24.3	2.81	(1.42)
Civic Education	20.5	30.8	17.9	15.4	15.4	3.26	(1.37)
Specialized Subject Matters in The Sciences							
Chemistry	9.3	22.2	35.2	18.5	14.8	2.93	(1.18)
Physics	17.5	19.3	26.3	21.1	15.8	3.02	(1.3?)
Biology	9.8	33.3	21.6	25.5	9.8	3.08	(1.18)
Human Culture	18.8	12.5	31.3	21.9	15.6	2.97	(1.33)

Item IIB1 7: To what extent are students encouraged to question evidence, challenge loose thinking and develop hypotheses as an accepted part of classroom behavior?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	25.9	27.1	21.2	14.1	11.8	3.41	(1.33)
Arabic Language	22.6	38.3	25.2	6.1	7.8	3.62	(1.14)
English Language	6.0	28.2	35.9	23.9	6.0	3.04	(1.00)
Mathematics	20.4	31.5	29.6	7.4	11.1	3.43	(1.22)
Specialized Subject Matters in The Arts							
General Sciences	19.2	50.0	26.9	3.8	0.0	3.85	(0.78)
History	33.9	33.9	21.0	6.5	4.8	3.86	(1.11)
Geography	18.9	32.4	27.0	9.5	12.2	3.37	(1.25)
Civic Education	25.0	40.0	17.5	7.5	10.0	3.63	(1.23)
Specialized Subject Matters in The Sciences							
Chemistry	18.9	49.1	17.0	11.3	3.8	3.68	(1.03)
Physics	19.3	45.6	26.3	7.0	1.8	3.74	(0.92)
Biology	26.0	40.0	26.0	4.0	4.0	3.80	(1.01)
Human Culture	28.1	28.1	31.3	9.4	3.1	3.69	(1.09)

Item IIB1 8: To what extent are students encouraged to develop investigations on their own?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	27.9	34.9	16.3	18.6	2.3	3.67	(1.14)
Arabic Language	24.6	37.7	27.2	7.9	2.6	3.74	(1.01)
English Language	1.8	18.4	50.9	23.7	5.3	2.88	(0.83)
Mathematics	10.9	32.7	30.0	18.2	8.2	3.20	(1.12)
Specialized Subject Matters in The Arts							
General Sciences	18.5	44.4	29.6	7.4	0.0	3.74	(0.86)
History	26.6	32.8	21.9	9.4	9.4	3.58	(1.25)
Geography	27.0	37.8	21.6	9.5	4.1	3.74	(1.09)
Civic Education	23.1	43.6	20.5	10.3	2.6	3.74	(1.02)
Specialized Subject Matters in The Sciences							
Chemistry	5.6	37.0	42.6	13.0	1.9	3.32	(0.84)
Physics	10.5	45.6	22.8	15.8	5.3	3.40	(1.05)
Biology	15.7	41.2	31.4	9.8	2.0	3.59	(0.94)
Human Culture	33.3	36.4	18.2	9.1	3.0	3.88	(1.08)

Item IIB1 9: To what degree does studying society help students improve their communication skills through activities such as listening, reading, writing, and logical thinking?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5 %	4 %	3 %	2 %	1 %		
Islamic Education	19.0	39.3	19.0	14.3	8.3	3.46	(1.20)
Arabic Language	22.6	39.1	31.3	5.2	1.7	3.76	(0.92)
English Language	8.6	48.3	31.0	6.9	5.2	3.48	(0.94)
Mathematics	12.3	39.6	35.8	8.5	3.8	3.48	(0.95)
Specialized Subject Matters in The Arts							
General Sciences	25.0	42.9	25.0	7.1	0.0	3.86	(0.89)
History	34.9	50.8	9.5	1.6	3.2	4.13	(0.89)
Geography	28.4	52.7	16.2	2.7	0.0	4.07	(0.75)
Civic Education	35.0	50.0	15.0	0.0	0.0	4.20	(0.69)
Specialized Subject Matters in The Sciences							
Chemistry	9.3	50.0	35.2	3.7	1.9	3.61	(0.79)
Physics	8.9	51.8	32.1	5.4	1.8	3.61	(0.80)
Biology	14.3	55.1	16.3	10.2	4.1	3.65	(0.99)
Human Culture	36.4	39.4	18.2	3.0	3.0	4.03	(0.98)

Part II Section B: Part 1
Classroom Activities: Methods of Instruction
(Supervisor)

Item IIB1 1: To what degree do your classroom procedures conform with the objectives of the course you supervise?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	8.3	8.3	75.0	8.3	2.17	(0.72)
Arabic Language	28.6	50.0	14.3	7.1	0.0	4.00	(0.88)
English Language	10.5	47.4	31.6	10.5	0.0	3.58	(0.84)
Mathematics	0.0	44.4	44.4	11.1	0.0	3.33	(0.71)
Specialized Subject Matters in The Arts							
General Sciences	16.7	33.3	33.3	16.7	0.0	3.50	(1.05)
History	12.5	50.0	25.0	12.5	0.0	3.63	(0.92)
Geography	0.0	57.1	42.9	0.0	0.0	3.57	(0.54)
Civic Education	0.0	33.3	50.0	16.7	0.0	3.17	(0.75)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50	(0.55)
Physics	0.0	100.0	0.0	0.0	0.0	4.00	(0.00)
Biology	0.0	75.0	25.0	0.0	0.0	3.75	(0.50)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67	(1.16)

Item IIB1 2: To what extent do you use the different methods of instruction suggested in the curriculum to suit below average, average and superior students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	0.0	41.7	33.3	25.0	2.17	(0.84)
Arabic Language	20.0	60.0	6.7	0.0	13.3	3.73	(1.22)
English Language	10.5	31.6	52.6	5.3	0.0	3.47	(0.77)
Mathematics	0.0	77.8	11.1	11.1	0.0	3.67	(0.71)
Specialized Subject Matters in The Arts							
General Sciences	40.0	0.0	20.0	40.0	0.0	3.40	(1.52)
History	12.5	37.5	37.5	12.5	0.0	3.50	(0.93)
Geography	14.3	28.6	42.9	0.0	14.3	3.29	(1.25)
Civic Education	0.0	33.3	33.3	16.7	16.7	2.83	(1.17)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33	(0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67	(0.58)
Biology	0.0	25.0	50.0	25.0	0.0	3.00	(0.82)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67	(0.58)

Item IIB1 3a: When teaching assignments are made, to what degree is consideration given to the academic background of the teachers?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean	(sd)
Islamic Education	0.0	0.0	25.0	50.0	25.0	2.00	(0.74)
Arabic Language	46.7	26.7	20.0	6.7	0.0	4.13	(0.99)
English Language	26.3	36.8	15.8	21.1	0.0	3.68	(1.11)
Mathematics	33.3	55.6	0.0	0.0	11.1	4.00	(1.23)
Specialized Subject Matters in The Arts							
General Sciences	20.0	60.0	0.0	20.0	0.0	3.80	(1.10)
History	50.0	25.0	25.0	0.0	0.0	4.25	(0.89)
Geography	71.4	0.0	28.6	0.0	0.0	4.43	(0.98)
Civic Education	50.0	16.7	16.7	16.7	0.0	4.00	(1.27)
Specialized Subject Matters in The Sciences							
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50	(0.55)
Physics	66.7	33.3	0.0	0.0	0.0	4.67	(0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50	(0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33	(1.16)

Item IIB1 3b: When teaching assignments are made, to what degree is consideration given to teaching experience?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean	(sd)
Islamic Education	0.0	8.3	0.0	58.3	33.3	1.83	(0.84)
Arabic Language	60.0	26.7	0.0	6.7	6.7	4.27	(1.22)
English Language	10.5	47.4	26.3	15.8	0.0	3.53	(0.91)
Mathematics	11.1	77.8	0.0	0.0	11.1	3.78	(1.09)
Specialized Subject Matters in The Arts							
General Sciences	50.0	25.0	0.0	0.0	25.0	3.75	(1.89)
History	62.5	25.0	12.5	0.0	0.0	4.50	(0.76)
Geography	71.4	0.0	28.6	0.0	0.0	4.43	(0.98)
Civic Education	50.0	0.0	33.3	16.7	0.0	3.83	(1.33)
Specialized Subject Matters in The Sciences							
Chemistry	50.0	50.0	0.0	0.0	0.0	4.50	(0.55)
Physics	66.7	33.3	0.0	0.0	0.0	4.67	(0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50	(0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33	(1.16)

Item IIB1 3c: When teaching assignments are made, to what degree is consideration given to the preference of the teachers?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	8.3	33.3	41.7	16.7	2.33	(0.89)
Arabic Language	33.3	40.0	13.3	13.3	0.0	3.93	(1.03)
English Language	5.3	21.1	42.1	26.3	5.3	2.95	(0.97)
Mathematics	11.1	55.6	11.1	11.1	11.1	3.44	(1.24)
Specialized Subject Matters in The Arts							
General Sciences	40.0	40.0	0.0	0.0	20.0	3.80	(1.64)
History	37.5	37.5	25.0	0.0	0.0	4.13	(0.84)
Geography	42.9	14.3	28.6	0.0	14.3	3.71	(1.50)
Civic Education	16.7	16.7	16.7	33.3	16.7	2.83	(1.47)
Specialized Subject Matters in The Sciences							
Chemistry	33.3	33.3	33.3	0.0	0.0	4.00	(0.89)
Physics	66.7	33.3	0.0	0.0	0.0	4.67	(0.58)
Biology	50.0	25.0	25.0	0.0	0.0	4.25	(0.96)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67	(0.58)

Item IIB1 4: To what degree do teachers' schedules include adequate time to make preparations for field and practical activities, as well as for classroom teaching?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	16.7	50.0	33.3	0.0	2.83	(0.72)
Arabic Language	7.1	35.7	42.9	7.1	7.1	3.29	(0.99)
English Language	0.0	21.1	31.6	21.1	26.3	2.47	(1.12)
Mathematics	0.0	33.3	33.3	11.1	22.2	2.78	(1.20)
Specialized Subject Matters in The Arts							
General Sciences	0.0	60.0	0.0	20.0	20.0	3.00	(1.41)
History	0.0	50.0	0.0	12.5	37.5	2.63	(1.51)
Geography	14.3	14.3	14.3	42.9	14.3	2.71	(1.38)
Civic Education	0.0	16.7	16.7	33.3	33.3	2.17	(1.17)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	16.7	50.0	33.3	0.0	2.83	(0.75)
Physics	0.0	33.3	33.3	33.3	0.0	3.00	(1.00)
Biology	25.0	0.0	50.0	25.0	0.0	3.25	(1.26)
Human Culture	0.0	33.3	33.3	0.0	33.3	2.67	(1.53)

Item IIB1 5: To what extent does the school library (if any) include a good selection of professional books, periodicals, newsletters, or other currrent subject matter information?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	8.3	25.0	25.0	33.3	8.3	2.92	(1.17)
Arabic Language	28.6	28.6	21.4	21.4	0.0	3.64	(1.15)
English Language	0.0	21.1	21.1	36.8	21.1	2.42	(1.07)
Mathematics	0.0	33.3	33.3	11.1	22.2	2.78	(1.20)
Specialized Subject Matters in The Arts							
General Sciences	16.7	0.0	66.7	0.0	16.7	3.00	(1.27)
History	12.5	12.5	37.5	12.5	25.0	2.75	(1.39)
Geography	0.0	14.3	42.9	28.6	14.3	2.57	(0.98)
Civic Education	0.0	0.0	50.0	50.0	0.0	2.50	(0.55)
Specialized Subject Matters in The Sciences							
Chemistry	16.7	0.0	16.7	66.7	0.0	2.67	(1.21)
Physics	0.0	0.0	66.7	0.0	33.3	2.33	(1.16)
Biology	25.0	0.0	0.0	75.0	0.0	2.75	(1.50)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67	(0.58)

Item IIB1 6: To what degree are regular teacher meetings held to discuss problems of implementation and improvement of the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	16.7	33.3	33.3	16.7	2.50	(1.00)
Arabic Language	13.3	46.7	26.7	6.7	6.7	3.53	(1.06)
English Language	5.3	10.5	52.6	31.6	0.0	2.90	(0.81)
Mathematics	0.0	22.2	55.6	11.1	11.1	2.89	(0.93)
Specialized Subject Matters in The Arts							
General Sciences	33.3	16.7	16.7	16.7	16.7	3.33	(1.63)
History	0.0	37.5	62.5	0.0	0.0	3.38	(0.52)
Geography	0.0	0.0	71.4	0.0	28.6	2.43	(0.98)
Civic Education	0.0	0.0	33.3	50.0	16.7	2.17	(0.75)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	50.0	16.7	33.3	0.0	3.17	(0.98)
Physics	33.3	0.0	33.3	0.0	33.3	3.00	(2.00)
Biology	25.0	50.0	0.0	25.0	0.0	3.75	(1.26)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67	(0.58)

Item IIB1 7: To what extent are students encouraged to question evidence, challenge loose thinking and develop hypotheses as an accepted part of classroom behavior?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	16.7	16.7	50.0	16.7	2.33	(0.99)
Arabic Language	26.7	33.3	26.7	13.3	0.0	3.73	(1.03)
English Language	5.3	10.5	52.6	15.8	15.8	2.74	(1.05)
Mathematics	11.1	55.6	22.2	0.0	11.1	3.56	(1.13)
Specialized Subject Matters in The Arts							
General Sciences	0.0	40.0	40.0	20.0	0.0	3.20	(0.84)
History	0.0	50.0	37.5	12.5	0.0	3.38	(0.74)
Geography	0.0	42.9	42.9	14.3	0.0	3.29	(0.76)
Civic Education	0.0	50.0	16.7	33.3	0.0	3.17	(0.98)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	50.0	33.3	16.7	0.0	3.33	(0.82)
Physics	0.0	66.7	33.3	0.0	0.0	3.67	(0.58)
Biology	25.0	25.0	50.0	0.0	0.0	3.75	(0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33	(0.58)

Item IIB1 8: To what extent are students encouraged to develop investigations on their own?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	8.3	41.7	25.0	25.0	2.33	(0.99)
Arabic Language	26.7	33.3	20.0	13.3	6.7	3.60	(1.24)
English Language	0.0	5.3	42.1	36.8	15.8	2.37	(0.83)
Mathematics	0.0	25.0	37.5	25.0	12.5	2.75	(1.04)
Specialized Subject Matters in The Arts							
General Sciences	16.7	33.3	16.7	33.3	0.0	3.33	(1.21)
History	12.5	25.0	62.5	0.0	0.0	3.50	(0.76)
Geography	0.0	0.0	71.4	14.3	14.3	2.57	(0.79)
Civic Education	0.0	16.7	50.0	16.7	16.7	2.67	(1.03)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	0.0	83.3	16.7	0.0	2.83	(0.41)
Physics	0.0	66.7	33.3	0.0	0.0	3.67	(0.58)
Biology	0.0	25.0	50.0	25.0	0.0	3.00	(0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33	(0.58)

Item IIB1 9: To what degree does studying society help students improve their communication skills through activities such as listening, reading, writing, and logical thinking?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean	(sd)
	5	4	3	2	1		
	%	%	%	%	%		
Islamic Education	0.0	0.0	16.7	41.7	41.7	1.75	(0.75)
Arabic Language	7.1	71.4	21.4	0.0	0.0	3.86	(0.54)
English Language	10.5	47.4	26.3	5.3	10.5	3.42	(1.12)
Mathematics	0.0	44.4	55.6	0.0	0.0	3.44	(0.53)
Specialized Subject Matters in The Arts							
General Sciences	16.7	83.3	0.0	0.0	0.0	4.17	(0.41)
History	50.0	25.0	25.0	0.0	0.0	4.25	(0.89)
Geography	28.6	28.6	28.6	14.3	0.0	3.71	(1.11)
Civic Education	16.7	33.3	33.3	16.7	0.0	3.50	(1.05)
Specialized Subject Matters in The Sciences							
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50	(0.55)
Physics	0.0	100.0	0.0	0.0	0.0	4.00	(0.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00	(0.82)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67	(1.16)

Part II Section B: Part 1
Classroom Activities: Method of Instruction
(Administrator)

Item IIB1	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what degree do your teachers classroom procedures confirm with the obhectives of the course you supervise?	13.3	50.7	30.7	5.3	0.0	3.72 (0.76)
2. To what extent do your teachers use the different methods of instruction suggested in the curriculum to suit below average, average and superior students?	13.3	44.0	30.7	10.7	1.3	3.57 (0.90)
3. When teaching assignments are made, to what degree is consideration given to factors such as:						
a. academic background of teachers?	71.6	18.9	6.8	2.7	0.0	4.60 (0.74)
b. teaching experience?	59.5	29.7	8.1	1.4	1.4	4.45 (0.81)
c. preference of teachers?	30.7	29.3	18.7	16.0	5.3	3.64 (1.23)
4. To what degree do your teachers schedules include adequate time to make preparations for field and practical activities, as well as for classroom teaching?	6.7	34.7	28.0	18.7	12.0	3.05 (1.14)
5. To what extent does the school library (if any) include a good selection of professional books, periodicals, newsletters, or other current subject matter information?	5.4	27.0	27.0	24.3	16.2	2.81 (1.17)
6. To what degree are regular teacher meetings held to discuss problems of implementation and improvement of the Omani curriculum?	13.3	44.0	29.3	13.3	0.0	3.57 (0.89)
7. To what extent are students encouraged to question evidence, challenge loose thinking and develop hypotheses as an accepted part of classroom behavior?	20.0	37.3	29.3	10.7	2.7	3.61 (1.01)
8. To what extent are students encouraged to develop investigations on their own?	12.0	34.7	41.3	8.0	4.0	3.43 (0.95)
9. To what degree does studying society help students improve their communication skills through activitiessuch as listening, reading, writing, and logical thinking?	26.0	45.2	26.0	1.4	1.4	3.93 (0.84)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Simetimes; 2 = Seldom; and 1 = Rarely

Part II Section B: Part 2
Classroom Activities: Student Assessment
(Teacher)

Item IIB2 1a: To what degree does your student assessment plan use techniques and instruments such as non-written performance tests?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	13.0	33.8	27.3	23.4	2.6	3.31 (1.06)
Arabic Language	13.4	33.0	25.0	16.1	12.5	3.19 (1.23)
English Language	2.6	23.7	43.0	20.2	10.5	2.88 (0.98)
Mathematics	5.6	22.4	31.8	27.1	13.1	2.80 (1.10)
Specialized Subject Matters in The Arts						
General Sciences	21.4	17.9	28.6	17.9	14.3	3.14 (1.35)
History	10.9	21.9	29.7	15.6	21.9	2.84 (1.30)
Geography	8.3	25.0	20.8	19.4	26.4	2.69 (1.33)
Civic Education	8.1	35.1	21.6	10.8	24.3	2.92 (1.34)
Specialized Subject Matters in The Sciences						
Chemistry	9.3	25.9	16.7	29.6	18.5	2.78 (1.28)
Physics	5.3	10.5	31.6	15.8	36.8	2.32 (1.23)
Biology	2.1	35.4	33.3	14.6	14.6	2.96 (1.09)
Human Culture	10.7	39.3	25.0	14.3	10.7	3.25 (1.18)

Item IIB2 1b: To what degree does your student assessment plan use techniques and instruments such as objective tests?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	18.4	38.2	21.1	17.1	5.3	3.47 (1.14)
Arabic Language	19.5	46.9	27.4	5.3	0.9	3.79 (0.85)
English Language	3.4	52.6	36.2	6.9	0.9	3.51 (0.72)
Mathematics	21.2	54.8	19.2	3.8	1.0	3.91 (0.80)
Specialized Subject Matters in The Arts						
General Sciences	30.8	50.0	11.5	3.8	3.8	4.00 (0.98)
History	29.7	46.9	15.6	4.7	3.1	3.95 (0.97)
Geography	30.1	50.7	16.4	1.4	1.4	4.07 (0.81)
Civic Education	40.0	40.0	17.5	2.5	0.0	4.18 (0.81)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	41.5	35.8	7.5	0.0	3.64 (0.83)
Physics	21.4	53.6	17.9	5.4	1.8	3.88 (0.88)
Biology	16.3	46.9	26.5	10.2	0.0	3.69 (0.87)
Human Culture	41.4	31.0	27.6	0.0	0.0	4.14 (0.83)

Item IIB2 1c: To what degree does your student assessment plan use techniques and instruments such as essay examinations?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	30.3	25.0	22.4	14.5	7.9	3.55 (1.28)
Arabic Language	24.6	43.0	24.6	6.1	1.8	3.83 (0.93)
English Language	0.9	16.5	47.8	26.1	8.7	2.75 (0.87)
Mathematics	16.4	50.0	22.7	10.0	0.9	3.71 (0.89)
Specialized Subject Matters in The Arts						
General Sciences	18.5	40.7	33.3	3.7	3.7	3.67 (0.96)
History	36.5	27.0	25.4	9.5	1.6	3.87 (1.07)
Geography	28.4	35.1	27.0	6.8	2.7	3.80 (1.02)
Civic Education	33.3	28.2	30.8	5.1	2.6	3.85 (1.04)
Specialized Subject Matters in The Sciences						
Chemistry	11.1	31.5	35.2	14.8	7.4	3.24 (1.08)
Physics	12.3	38.6	33.3	14.0	1.8	3.46 (0.95)
Biology	12.5	43.8	29.2	12.5	2.1	3.52 (0.95)
Human Culture	20.0	46.7	16.7	10.0	6.7	3.63 (1.13)

Item IIB2 1d: To what degree does your student assessment plan use techniques and instruments such as teacher observation?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	41.6	22.1	15.6	13.0	7.8	3.77 (1.33)
Arabic Language	34.2	45.6	14.9	3.5	1.8	4.07 (0.89)
English Language	7.1	40.2	42.9	8.0	1.8	3.43 (0.81)
Mathematics	39.4	34.9	21.1	3.7	0.9	4.08 (0.91)
Specialized Subject Matters in The Arts						
General Sciences	14.8	59.3	11.1	11.1	3.7	3.70 (0.99)
History	35.5	41.9	12.9	6.5	3.2	4.00 (1.02)
Geography	38.6	41.4	10.0	4.3	5.7	4.03 (1.09)
Civic Education	40.5	43.2	8.1	8.1	0.0	4.16 (0.90)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	39.6	20.8	13.2	11.3	3.34 (1.22)
Physics	21.4	32.1	26.8	10.7	8.9	3.46 (1.21)
Biology	26.5	44.9	16.3	6.1	6.1	3.80 (1.10)
Human Culture	46.7	26.7	16.7	6.7	3.3	4.07 (1.11)

Item IIB2 2: To what degree does your assessment plan reflect balanced emphasis among conceptual schemes, process skills, social aspects of social studies, and values and attitudes?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	19.5	37.7	24.7	14.3	3.9	3.55 (1.08)
Arabic Language	10.1	46.8	35.8	5.5	1.8	3.58 (0.82)
English Language	1.8	31.3	51.8	10.7	4.5	3.15 (0.81)
Mathematics	10.1	33.9	49.5	4.6	1.8	3.46 (0.81)
Specialized Subject Matters in The Arts						
General Sciences	7.1	53.6	32.1	3.6	3.6	3.57 (0.84)
History	23.8	39.7	27.0	6.3	3.2	3.75 (1.00)
Geography	27.0	33.8	27.0	12.2	0.0	3.76 (0.99)
Civic Education	28.9	39.5	23.7	7.9	0.0	3.90 (0.92)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	52.8	28.3	7.5	1.9	3.60 (0.84)
Physics	3.6	55.4	35.7	5.4	0.0	3.57 (0.66)
Biology	13.7	47.1	31.4	3.9	3.9	3.63 (0.92)
Human Culture	25.0	31.3	37.5	6.3	0.0	3.75 (0.92)

Item IIB2 3: To what degree have secondary school teachers received In-Service or other training regarding assessment and performance measure?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	13.1	29.8	28.6	21.4	7.1	3.20 (1.14)
Arabic Language	23.5	27.0	34.8	13.0	1.7	3.57 (1.04)
English Language	2.6	26.7	50.0	12.1	8.6	3.03 (0.92)
Mathematics	7.4	35.2	26.9	21.3	9.3	3.10 (1.11)
Specialized Subject Matters in The Arts						
General Sciences	7.4	40.7	33.3	18.5	0.0	3.37 (0.88)
History	26.2	27.9	19.7	11.5	14.8	3.39 (1.38)
Geography	12.2	29.7	37.8	6.8	13.5	3.20 (1.17)
Civic Education	15.4	33.3	28.2	15.4	7.7	3.33 (1.16)
Specialized Subject Matters in The Sciences						
Chemistry	11.1	35.2	29.6	14.8	9.3	3.24 (1.13)
Physics	12.3	38.6	24.6	19.3	5.3	3.33 (1.09)
Biology	7.8	41.2	27.5	17.6	5.9	3.28 (1.04)
Human Culture	12.1	30.3	30.3	15.2	12.1	3.15 (1.20)

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Item IIB2 4: To what extent do you provide a continual (daily, lesson-by-lesson, or unit-by-unit) evaluation of students in a formative manner?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	43.7	23.0	12.6	6.9	13.8	3.76 (1.43)
Arabic Language	38.6	43.9	14.0	2.6	0.9	4.17 (0.83)
English Language	6.1	50.9	29.8	12.3	0.9	3.49 (0.82)
Mathematics	37.8	43.2	14.4	1.8	2.7	4.12 (0.91)
Specialized Subject Matters in The Arts						
General Sciences	32.0	48.0	16.0	4.0	0.0	4.08 (0.81)
History	53.1	32.8	12.5	1.6	0.0	4.38 (0.77)
Geography	56.8	27.0	14.9	1.4	0.0	4.39 (0.79)
Civic Education	50.0	32.5	12.5	5.0	0.0	4.28 (0.88)
Specialized Subject Matters in The Sciences						
Chemistry	27.8	57.4	14.8	0.0	0.0	4.13 (0.65)
Physics	26.3	50.9	21.1	1.8	0.0	4.02 (0.74)
Biology	35.3	47.1	11.8	3.9	2.0	4.10 (0.90)
Human Culture	39.4	39.4	15.2	3.0	3.0	4.09 (0.98)

Item IIB2 5a: To what degree do your tests assess recall of facts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	39.2	27.8	11.4	10.1	11.4	3.73 (1.38)
Arabic Language	35.4	43.4	16.8	2.7	1.8	4.08 (0.89)
English Language	4.3	33.0	41.7	14.8	6.1	3.15 (0.94)
Mathematics	43.1	42.2	11.0	2.8	0.9	4.24 (0.83)
Specialized Subject Matters in The Arts						
General Sciences	25.9	44.4	22.2	7.4	0.0	3.89 (0.89)
History	41.3	41.3	15.9	0.0	1.6	4.21 (0.83)
Geography	47.2	30.6	22.2	0.0	0.0	4.25 (0.80)
Civic Education	47.5	40.0	7.5	5.0	0.0	4.30 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	24.5	50.9	20.8	1.9	1.9	3.94 (0.84)
Physics	28.1	52.6	12.3	5.3	1.8	4.00 (0.89)
Biology	36.7	51.0	4.1	6.1	2.0	4.14 (0.91)
Human Culture	36.4	24.2	33.3	6.1	0.0	3.91 (0.98)

Item IIB2 5b: To what degree do your tests assess comprehension?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	41.3	25.3	9.3	10.7	13.3	3.71 (1.44)
Arabic Language	40.4	43.0	12.3	2.6	1.8	4.18 (0.88)
English Language	12.2	73.9	11.3	2.6	0.0	3.96 (0.58)
Mathematics	55.0	31.2	10.1	2.8	0.9	4.37 (0.85)
Specialized Subject Matters in The Arts						
General Sciences	40.7	40.7	14.8	0.0	3.7	4.15 (0.95)
History	50.0	39.1	10.9	0.0	0.0	4.39 (0.68)
Geography	45.2	42.5	12.3	0.0	0.0	4.33 (0.69)
Civic Education	66.7	28.2	2.6	2.6	0.0	4.59 (0.68)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	55.6	11.1	0.0	0.0	4.22 (0.63)
Physics	35.1	54.4	8.8	0.0	1.8	4.21 (0.75)
Biology	38.8	40.8	18.4	2.0	0.0	4.16 (0.80)
Human Culture	48.4	38.7	12.9	0.0	0.0	4.36 (0.71)

Item IIB2 5c: To what degree do your tests assess ability to analyze?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	35.9	20.5	19.2	14.1	10.3	3.58 (1.37)
Arabic Language	37.2	37.2	21.2	3.5	0.9	4.06 (0.90)
English Language	2.6	39.5	41.2	14.0	2.6	3.25 (0.83)
Mathematics	31.2	45.9	18.3	3.7	0.9	4.03 (0.86)
Specialized Subject Matters in The Arts						
General Sciences	18.5	40.7	22.2	11.1	7.4	3.52 (1.16)
History	46.0	38.1	12.7	3.2	0.0	4.27 (0.81)
Geography	37.0	37.0	21.9	2.7	1.4	4.06 (0.91)
Civic Education	40.0	42.5	12.5	5.0	0.0	4.18 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	13.0	53.7	27.8	3.7	1.9	3.72 (0.81)
Physics	23.6	45.5	20.0	5.5	5.5	3.76 (1.05)
Biology	28.0	40.0	26.0	6.0	0.0	3.90 (0.89)
Human Culture	29.0	38.7	25.8	6.5	0.0	3.90 (0.91)

Item IIB2 5d: To what degree do your tests assess ability to apply?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	35.4	24.1	17.7	13.9	8.9	3.63 (1.33)
Arabic Language	42.1	34.2	18.4	3.5	1.8	4.11 (0.95)
English Language	1.8	41.2	43.0	13.2	0.9	3.30 (0.75)
Mathematics	41.5	41.5	11.3	5.7	0.0	4.19 (0.85)
Specialized Subject Matters in The Arts						
General Sciences	29.6	37.0	22.2	3.7	7.4	3.78 (1.16)
History	42.2	40.6	9.4	6.3	1.6	4.16 (0.95)
Geography	38.4	35.6	21.9	4.1	0.0	4.08 (0.88)
Civic Education	35.0	47.5	15.0	2.5	0.0	4.15 (0.77)
Specialized Subject Matters in The Sciences						
Chemistry	20.8	54.7	22.6	1.9	0.0	3.94 (0.72)
Physics	26.3	43.9	19.3	8.8	1.8	3.84 (0.98)
Biology	33.3	37.5	25.0	4.2	0.0	4.00 (0.88)
Human Culture	31.3	28.1	28.1	12.5	0.0	3.78 (1.04)

Item IIB2 5e: To what degree do your tests assess problem-solving?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.1	22.8	27.8	13.9	6.3	3.54 (1.23)
Arabic Language	30.6	41.4	17.1	8.1	2.7	3.89 (1.02)
English Language	2.7	23.0	37.2	29.2	8.0	2.83 (0.96)
Mathematics	24.3	38.3	23.4	10.3	3.7	3.69 (1.07)
Specialized Subject Matters in The Arts						
General Sciences	25.9	37.0	25.9	3.7	7.4	3.70 (1.14)
History	33.9	35.5	14.5	12.9	3.2	3.84 (1.13)
Geography	35.6	28.8	26.0	8.2	1.4	3.89 (1.04)
Civic Education	35.0	40.0	17.5	5.0	2.5	4.00 (0.99)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	34.0	30.2	13.2	7.5	3.36 (1.13)
Physics	16.1	46.4	25.0	7.1	5.4	3.61 (1.02)
Biology	24.0	36.0	28.0	10.0	2.0	3.70 (1.02)
Human Culture	36.4	39.4	15.2	6.1	3.0	4.00 (1.03)

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Item IIB2 6: To what extent is assessment of student achievement made interms of success in meeting objectives specified by the curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	30.6	24.7	22.4	15.3	7.1	3.57 (1.27)
Arabic Language	24.3	52.2	18.3	3.5	1.7	3.94 (0.85)
English Language	4.3	43.1	39.7	11.2	1.7	3.37 (0.81)
Mathematics	17.1	55.0	22.5	5.4	0.0	3.84 (0.77)
Specialized Subject Matters in The Arts						
General Sciences	17.9	42.9	35.7	3.6	0.0	3.75 (0.80)
History	23.8	46.0	22.2	6.3	1.6	3.84 (0.92)
Geography	25.7	51.4	18.9	2.7	1.4	3.97 (0.83)
Civic Education	32.5	47.5	7.5	7.5	5.0	3.95 (1.09)
Specialized Subject Matters in The Sciences						
Chemistry	13.0	42.6	40.7	1.9	1.9	3.63 (0.81)
Physics	14.0	57.9	21.1	5.3	1.8	3.77 (0.82)
Biology	15.7	52.9	25.5	5.9	0.0	3.78 (0.78)
Human Culture	34.4	43.8	15.6	6.3	0.0	4.06 (0.88)

Item IIB2 7: To what extent is student assessment used in revising and improving instructional activities?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.0	30.0	36.2	8.7	5.0	3.51 (1.07)
Arabic Language	14.3	34.8	25.9	14.3	10.7	3.28 (1.20)
English Language	1.8	31.0	43.4	19.5	4.4	3.06 (0.87)
Mathematics	13.9	28.7	27.8	22.2	7.4	3.19 (1.16)
Specialized Subject Matters in The Arts						
General Sciences	14.8	25.9	44.4	7.4	7.4	3.33 (1.07)
History	20.6	30.2	30.2	6.3	12.7	3.40 (1.25)
Geography	16.2	25.7	27.0	17.6	13.5	3.14 (1.28)
Civic Education	25.6	33.3	23.1	10.3	7.7	3.59 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	9.3	35.2	33.3	11.1	11.1	3.20 (1.12)
Physics	10.5	29.8	36.8	12.3	10.5	3.18 (1.12)
Biology	16.0	32.0	36.0	10.0	6.0	3.42 (1.07)
Human Culture	21.9	34.4	21.9	12.5	9.4	3.47 (1.24)

Item IIB2 8a: To what degree do you prefer that the tests in secondary school be made by teachers?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	44.9	20.5	9.0	9.0	16.7	3.68 (1.53)
Arabic Language	41.8	19.1	16.4	10.9	11.8	3.68 (1.41)
English Language	34.2	36.8	20.2	6.1	2.6	3.94 (1.02)
Mathematics	50.9	28.3	13.2	3.8	3.8	4.19 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	48.1	29.6	18.5	3.7	0.0	4.22 (0.89)
History	77.4	14.5	1.6	3.2	3.2	4.60 (0.93)
Geography	63.9	16.7	6.9	2.8	9.7	4.22 (1.29)
Civic Education	67.5	17.5	7.5	5.0	2.5	4.43 (1.01)
Specialized Subject Matters in The Sciences						
Chemistry	56.6	18.9	17.0	5.7	1.9	4.23 (1.05)
Physics	51.8	32.1	7.1	5.4	3.6	4.23 (1.04)
Biology	58.8	23.5	5.9	9.8	2.0	4.28 (1.08)
Human Culture	80.0	16.7	0.0	3.3	0.0	4.73 (0.64)

Item IIB2 8b: To what degree do you prefer that the tests in secondary school be made by the school?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	9.1	40.3	19.5	26.0	5.2	3.22 (1.10)
Arabic Language	19.3	22.9	22.0	13.8	22.0	3.04 (1.43)
English Language	5.8	26.0	33.7	8.7	26.0	2.77 (1.26)
Mathematics	9.5	34.3	25.7	19.0	11.4	3.11 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	17.9	39.3	32.1	7.1	3.6	3.61 (0.99)
History	8.9	30.4	19.6	12.5	28.6	2.79 (1.39)
Geography	13.7	35.6	17.8	11.0	21.9	3.08 (1.38)
Civic Education	19.4	27.8	13.9	16.7	22.2	3.06 (1.47)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	35.8	20.8	15.1	13.2	3.25 (1.27)
Physics	16.7	33.3	29.6	11.1	9.3	3.37 (1.17)
Biology	6.1	44.9	20.4	20.4	8.2	3.20 (1.10)
Human Culture	33.3	25.9	25.9	11.1	3.7	3.74 (1.16)

Item IIB2 8c: To what degree do you prefer that the tests in secondary school be made by the school district?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	23.7	5.0	33.7	16.2	11.2	3.24 (1.30)
Arabic Language	38.5	2.0	19.3	8.3	11.9	3.67 (1.38)
English Language	12.8	8.4	22.0	10.1	26.6	2.91 (1.41)
Mathematics	18.7	4.3	25.2	9.3	22.4	3.08 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	17.9	42.9	14.3	10.7	14.3	3.39 (1.32)
History	13.8	29.3	12.1	19.0	25.9	2.86 (1.44)
Geography	31.5	17.8	23.3	6.8	20.5	3.33 (1.50)
Civic Education	27.0	32.4	8.1	13.5	18.9	3.35 (1.50)
Specialized Subject Matters in The Sciences						
Chemistry	9.3	25.9	24.1	22.2	18.5	2.85 (1.27)
Physics	18.2	29.1	32.7	7.3	12.7	3.33 (1.23)
Biology	12.2	28.6	34.7	18.4	6.1	3.22 (1.09)
Human Culture	11.1	18.5	14.8	40.7	14.8	2.70 (1.27)

Item IIB2 9: To what degree do the existing examinations in your school and school district account for individual differences of students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.8	45.6	10.1	13.9	7.6	3.62 (1.20)
Arabic Language	30.1	33.6	24.8	8.8	2.7	3.80 (1.05)
English Language	3.6	28.8	45.0	13.5	9.0	3.05 (0.97)
Mathematics	21.8	48.2	21.8	3.6	4.5	3.79 (0.98)
Specialized Subject Matters in The Arts						
General Sciences	17.9	39.3	32.1	7.1	3.6	3.61 (0.99)
History	27.0	50.8	19.0	3.2	0.0	4.02 (0.77)
Geography	27.0	43.2	23.0	6.8	0.0	3.91 (0.88)
Civic Education	30.0	42.5	15.0	10.0	2.5	3.88 (1.04)
Specialized Subject Matters in The Sciences						
Chemistry	14.8	35.2	40.7	9.3	0.0	3.56 (0.86)
Physics	14.0	50.9	24.6	10.5	0.0	3.68 (0.85)
Biology	21.6	56.9	9.8	11.8	0.0	3.88 (0.89)
Human Culture	31.3	34.4	25.0	6.3	3.1	3.84 (1.05)

Item IIB2 10: To what extent do tests contain a few items simple enough for all students to answer?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	39.3	22.6	17.9	3.6	3.48 (1.08)
Arabic Language	17.5	40.4	32.5	8.8	0.9	3.65 (0.90)
English Language	11.2	37.9	42.2	6.9	1.7	3.50 (0.85)
Mathematics	16.2	42.3	34.2	5.4	1.8	3.66 (0.88)
Specialized Subject Matters in The Arts						
General Sciences	11.1	59.3	22.2	3.7	3.7	3.70 (0.87)
History	32.8	40.6	21.9	4.7	0.0	4.02 (0.86)
Geography	25.7	44.6	21.6	8.1	0.0	3.88 (0.89)
Civic Education	30.8	46.2	15.4	7.7	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	7.4	35.2	38.9	16.7	1.9	3.30 (0.90)
Physics	8.8	45.6	29.8	15.8	0.0	3.47 (0.87)
Biology	16.3	59.2	16.3	8.2	0.0	3.84 (0.80)
Human Culture	27.3	39.4	27.3	6.1	0.0	3.88 (0.89)

Item IIB2 11: To what extent are the tests designed to avoid reading rate and comprehension contamination?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	28.7	32.5	18.8	11.2	8.7	3.61 (1.26)
Arabic Language	21.8	40.9	25.5	9.1	2.7	3.70 (1.00)
English Language	2.6	31.3	41.7	13.0	11.3	3.01 (1.00)
Mathematics	19.2	47.1	21.2	10.6	1.9	3.71 (0.96)
Specialized Subject Matters in The Arts						
General Sciences	23.1	38.5	26.9	11.5	0.0	3.73 (0.96)
History	30.6	37.1	21.0	8.1	3.2	3.84 (1.06)
Geography	23.9	33.8	33.8	4.2	4.2	3.69 (1.02)
Civic Education	27.5	37.5	17.5	15.0	2.5	3.73 (1.11)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	45.3	28.3	11.3	0.0	3.64 (0.88)
Physics	19.6	48.2	16.1	10.7	5.4	3.66 (1.08)
Biology	21.6	43.1	25.5	9.8	0.0	3.77 (0.91)
Human Culture	21.9	50.0	18.8	9.4	0.0	3.84 (0.88)

Item IIB2 12: To what degree are the tests representative of different test item types (eg. true-false, completions, multiple choice, etc.)?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	31.8	27.1	17.6	17.6	5.9	3.61 (1.26)
Arabic Language	32.5	36.8	21.9	6.1	2.6	3.90 (1.01)
English Language	15.7	53.0	27.8	1.7	1.7	3.79 (0.79)
Mathematics	26.6	38.5	23.9	9.2	1.8	3.79 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	33.3	33.3	25.9	7.4	0.0	3.93 (0.96)
History	47.6	36.5	12.7	3.2	0.0	4.29 (0.81)
Geography	54.1	33.8	8.1	4.1	0.0	4.38 (0.81)
Civic Education	61.5	23.1	12.8	2.6	0.0	4.44 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	35.2	24.1	7.4	0.0	3.94 (0.94)
Physics	38.6	38.6	21.1	0.0	1.8	4.12 (0.87)
Biology	25.0	56.3	16.7	2.1	0.0	4.04 (0.71)
Human Culture	50.0	31.3	15.6	0.0	3.1	4.25 (0.95)

Item IIB2 13: To what degree are the test instructions clear and explicit?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	32.9	34.1	14.6	13.4	4.9	3.77 (1.19)
Arabic Language	35.4	45.1	15.9	0.9	2.7	4.10 (0.89)
English Language	11.0	56.9	27.5	2.8	1.8	3.73 (0.77)
Mathematics	22.1	51.0	18.3	6.7	1.9	3.85 (0.91)
Specialized Subject Matters in The Arts						
General Sciences	18.5	48.1	33.3	0.0	0.0	3.85 (0.72)
History	31.3	45.3	20.3	3.1	0.0	4.05 (0.81)
Geography	34.7	45.8	12.5	6.9	0.0	4.08 (0.87)
Civic Education	27.5	52.5	10.0	2.5	7.5	3.90 (1.08)
Specialized Subject Matters in The Sciences						
Chemistry	25.9	53.7	20.4	0.0	0.0	4.06 (0.69)
Physics	20.0	52.7	21.8	3.6	1.8	3.86 (0.85)
Biology	25.5	51.0	13.7	3.9	5.9	3.86 (1.04)
Human Culture	24.2	57.6	9.1	6.1	3.0	3.94 (0.93)

Item IIB2 14: To what extent are the test items clear and concise?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	28.2	38.8	11.8	14.1	7.1	3.67 (1.23)
Arabic Language	25.9	47.4	17.2	7.8	1.7	3.88 (0.94)
English Language	8.5	62.4	26.5	2.6	0.0	3.77 (0.64)
Mathematics	26.2	51.4	17.8	2.8	1.9	3.97 (0.85)
Specialized Subject Matters in The Arts						
General Sciences	21.4	64.3	10.7	3.6	0.0	4.04 (0.69)
History	32.8	51.6	9.4	6.3	0.0	4.11 (0.82)
Geography	43.2	39.2	10.8	4.1	2.7	4.16 (0.97)
Civic Education	37.5	40.0	10.0	10.0	2.5	4.00 (1.06)
Specialized Subject Matters in The Sciences						
Chemistry	31.5	46.3	18.5	1.9	1.9	4.04 (0.87)
Physics	19.3	57.9	14.0	7.0	1.8	3.86 (0.88)
Biology	33.3	47.1	13.7	5.9	0.0	4.08 (0.85)
Human Culture	34.4	46.9	15.6	3.1	0.0	4.13 (0.79)

Item IIB2 15: To what degree does the teacher explain to the students the specific competencies (i.e., behaviors, skills, and concepts) that the students are to attain?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	32.9	27.8	13.9	16.5	8.9	3.60 (1.34)
Arabic Language	24.3	46.1	21.7	5.2	2.6	3.84 (0.94)
English Language	9.7	38.9	39.8	9.7	1.8	3.45 (0.87)
Mathematics	23.6	41.5	27.4	5.7	1.9	3.79 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	29.6	33.3	29.6	7.4	0.0	3.85 (0.95)
History	28.6	50.8	15.9	1.6	3.2	4.00 (0.90)
Geography	27.0	33.8	29.7	5.4	4.1	3.74 (1.05)
Civic Education	32.5	45.0	15.0	5.0	2.5	4.00 (0.96)
Specialized Subject Matters in The Sciences						
Chemistry	18.5	40.7	31.5	7.4	1.9	3.67 (0.93)
Physics	22.8	36.8	29.8	10.5	0.0	3.72 (0.94)
Biology	20.8	45.8	29.2	4.2	0.0	3.83 (0.81)
Human Culture	28.1	46.9	15.6	6.3	3.1	3.91 (1.00)

Item IIB2 16a: To what degree are test grades based on criterion reference?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	18.9	39.2	23.0	14.9	4.1	3.54 (1.09)
Arabic Language	12.4	34.5	29.2	15.0	8.8	3.27 (1.13)
English Language	1.8	34.9	50.5	7.3	5.5	3.20 (0.83)
Mathematics	9.3	29.6	38.9	12.0	10.2	3.16 (1.09)
Specialized Subject Matters in The Arts						
General Sciences	0.0	37.0	33.3	11.1	18.5	2.89 (1.12)
History	15.9	41.3	23.8	9.5	9.5	3.44 (1.16)
Geography	15.7	32.9	28.6	8.6	14.3	3.27 (1.25)
Civic Education	18.4	28.9	23.7	15.8	13.2	3.24 (1.30)
Specialized Subject Matters in The Sciences						
Chemistry	5.9	23.5	43.1	15.7	11.8	2.96 (1.06)
Physics	5.4	33.9	28.6	17.9	14.3	2.98 (1.15)
Biology	10.9	54.3	28.3	4.3	2.2	3.67 (0.82)
Human Culture	12.9	45.2	29.0	12.9	0.0	3.58 (0.89)

Item IIB2 16b: To what degree are test grades based on normative reference?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	32.1	29.5	15.4	11.5	11.5	3.59 (1.35)
Arabic Language	23.7	43.0	21.1	6.1	6.1	3.72 (1.09)
English Language	11.2	29.9	46.7	8.4	3.7	3.36 (0.93)
Mathematics	30.6	26.1	31.5	7.2	4.5	3.71 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	28.6	42.9	25.0	0.0	3.6	3.93 (0.94)
History	40.3	29.0	21.0	8.1	1.6	3.98 (1.05)
Geography	35.7	40.0	18.6	4.3	1.4	4.04 (0.92)
Civic Education	35.9	38.5	23.1	0.0	2.6	4.05 (0.92)
Specialized Subject Matters in The Sciences						
Chemistry	30.8	46.2	13.5	3.8	5.8	3.92 (1.06)
Physics	36.8	38.6	19.3	5.3	0.0	4.07 (0.88)
Biology	19.6	45.7	30.4	2.2	2.2	3.78 (0.87)
Human Culture	40.6	40.6	9.4	9.4	0.0	4.13 (0.94)

Item IIB2 17a: To what extent is the assessment method used throughout instruction designed to provide interim reports of student progress?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	42.2	18.1	15.7	12.0	12.0	3.66 (1.43)
Arabic Language	33.3	37.7	17.5	9.6	1.8	3.91 (1.03)
English Language	9.4	35.0	35.9	17.9	1.7	3.33 (0.94)
Mathematics	25.7	49.5	11.9	6.4	6.4	3.82 (1.09)
Specialized Subject Matters in The Arts						
General Sciences	26.9	50.0	19.2	3.8	0.0	4.00 (0.80)
History	41.0	37.7	8.2	9.8	3.3	4.03 (1.10)
Geography	31.9	44.4	13.9	6.9	2.8	3.96 (1.00)
Civic Education	35.0	30.0	27.5	7.5	0.0	3.93 (0.97)
Specialized Subject Matters in The Sciences						
Chemistry	18.5	29.6	35.2	11.1	5.6	3.44 (1.09)
Physics	24.6	43.9	17.9	7.0	7.0	3.72 (1.13)
Biology	24.5	36.7	28.6	8.2	2.0	3.74 (1.00)
Human Culture	31.3	37.5	21.9	6.3	3.1	3.88 (1.04)

Item IIB2 17b: To what extent is the assessment method used throughout instruction designed to provide specific diagnoses of student strengths and weaknesses?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	42.9	23.8	9.5	8.3	15.5	3.70 (1.48)
Arabic Language	39.5	39.5	16.7	3.5	0.9	4.13 (0.88)
English Language	3.5	35.4	38.9	20.4	1.8	3.19 (0.86)
Mathematics	31.5	40.7	18.5	6.5	2.8	3.92 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	37.0	44.4	18.5	0.0	0.0	4.19 (0.74)
History	34.9	46.0	9.5	7.9	1.6	4.05 (0.96)
Geography	35.6	46.6	12.3	4.1	1.4	4.11 (0.88)
Civic Education	35.0	40.0	17.5	7.5	0.0	4.03 (0.92)
Specialized Subject Matters in The Sciences						
Chemistry	14.8	48.1	25.9	5.6	5.6	3.61 (1.00)
Physics	22.8	54.4	17.5	5.3	0.0	3.95 (0.79)
Biology	22.0	52.0	22.0	2.0	2.0	3.90 (0.84)
Human Culture	28.1	37.5	28.1	3.1	3.1	3.84 (0.99)

Item IIB2 17c: To what extent is the assessment method used throughout instruction designed to provide information to both the student and the teacher?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	26.5	30.1	18.1	18.1	7.2	3.51 (1.26)
Arabic Language	33.0	33.0	23.2	8.9	1.8	3.87 (1.04)
English Language	2.6	38.3	47.8	8.7	2.6	3.30 (0.77)
Mathematics	22.1	43.3	23.1	7.7	3.8	3.72 (1.02)
Specialized Subject Matters in The Arts						
General Sciences	21.4	46.4	32.1	0.0	0.0	3.89 (0.74)
History	32.2	44.1	16.9	5.1	1.7	4.00 (0.93)
Geography	24.3	44.6	23.0	2.7	5.4	3.80 (1.02)
Civic Education	26.3	36.8	15.8	15.8	5.3	3.63 (1.20)
Specialized Subject Matters in The Sciences						
Chemistry	9.3	38.9	35.2	13.0	3.7	3.37 (0.96)
Physics	13.0	53.7	24.1	7.4	1.9	3.69 (0.87)
Biology	20.0	36.0	34.0	6.0	4.0	3.62 (1.01)
Human Culture	29.0	38.7	22.6	6.5	3.2	3.84 (1.04)

Item IIB2 18: To what degree are final tests used to provide a basis on which grades for the course are assigned?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	32.1	30.8	14.1	11.5	11.5	3.60 (1.35)
Arabic Language	30.3	39.4	22.0	6.4	1.8	3.90 (0.97)
English Language	3.5	40.7	37.2	17.7	0.9	3.28 (0.83)
Mathematics	26.4	40.9	24.5	5.5	2.7	3.83 (0.98)
Specialized Subject Matters in The Arts						
General Sciences	25.0	60.7	14.3	0.0	0.0	4.11 (0.63)
History	31.7	41.3	17.5	6.3	3.2	3.92 (1.02)
Geography	27.0	40.5	18.9	12.2	1.4	3.80 (1.02)
Civic Education	48.7	33.3	10.3	7.7	0.0	4.23 (0.93)
Specialized Subject Matters in The Sciences						
Chemistry	28.3	56.6	7.5	7.5	0.0	4.06 (0.82)
Physics	26.3	42.1	26.3	3.5	1.8	3.88 (0.91)
Biology	32.7	40.8	20.4	4.1	2.0	3.98 (0.95)
Human Culture	43.8	34.4	18.8	0.0	3.1	4.16 (0.95)

Item IIB2 19: To what degree are tests used to provide data from which reports to parents and transcripts are prepared?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	42.3	25.6	12.8	6.4	12.8	3.78 (1.39)
Arabic Language	37.2	38.1	17.7	6.2	0.9	4.04 (0.94)
English Language	9.7	38.1	27.4	18.6	6.2	3.27 (1.07)
Mathematics	39.1	44.5	9.1	5.5	1.8	4.14 (0.92)
Specialized Subject Matters in The Arts						
General Sciences	40.7	33.3	14.8	11.1	0.0	4.04 (1.02)
History	35.9	43.8	14.1	1.6	4.7	4.05 (1.00)
Geography	46.6	39.7	9.6	2.7	1.4	4.27 (0.85)
Civic Education	57.5	20.0	20.0	2.5	0.0	4.33 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	30.2	32.1	30.2	3.8	3.8	3.81 (1.04)
Physics	39.3	42.9	12.5	5.4	0.0	4.16 (0.85)
Biology	42.0	40.0	10.0	8.0	0.0	4.16 (0.91)
Human Culture	43.8	37.5	15.6	3.1	0.0	4.22 (0.83)

Part II Section B: Part 2
Classroom Activities: Student Assessment
(Supervisor)

Item IIB2 1a: To what degree does your student assessment plan use techniques and instruments such as non-written performance tests?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	33.3	50.0	16.7	0.0	3.17 (0.72)
Arabic Language	7.1	57.1	14.3	14.3	7.1	3.43 (1.09)
English Language	0.0	31.6	36.8	15.8	15.8	2.84 (1.07)
Mathematics	0.0	33.3	33.3	22.2	11.1	2.89 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	16.7	0.0	33.3	3.00 (1.67)
History	0.0	0.0	42.9	28.6	28.6	2.14 (0.90)
Geography	0.0	14.3	57.1	0.0	28.6	2.57 (1.13)
Civic Education	0.0	0.0	50.0	0.0	50.0	2.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	0.0	33.3	16.7	33.3	2.50 (1.52)
Physics	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)
Biology	25.0	0.0	0.0	0.0	75.0	2.00 (2.00)
Human Culture	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)

Item IIB2 1b: To what degree does your student assessment plan use techniques and instruments such as objective tests?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	33.3	58.3	8.3	2.25 (0.62)
Arabic Language	35.7	28.6	28.6	7.1	0.0	3.93 (1.00)
English Language	5.3	42.1	47.4	5.3	0.0	3.47 (0.70)
Mathematics	11.1	88.9	0.0	0.0	0.0	4.11 (0.33)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	28.6	14.3	57.1	0.0	0.0	3.71 (0.95)
Civic Education	33.3	0.0	50.0	16.7	0.0	3.50 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	16.7	0.0	16.7	3.33 (1.21)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIB2 1c: To what degree does your student assessment plan use techniques and instruments such as essay examinations?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	16.7	50.0	33.3	1.83 (0.72)
Arabic Language	30.8	53.8	15.4	0.0	0.0	4.15 (0.69)
English Language	0.0	5.3	26.3	36.8	31.6	2.05 (0.91)
Mathematics	11.1	77.8	0.0	11.1	0.0	3.89 (0.78)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
Geography	14.3	14.3	57.1	14.3	0.0	3.29 (0.95)
Civic Education	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	80.0	20.0	0.0	0.0	3.80 (0.45)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Item IIB2 1d: To what degree does your student assessment plan use techniques and instruments such as teacher observation?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	33.3	16.7	16.7	25.0	2.83 (1.40)
Arabic Language	21.4	50.0	28.6	0.0	0.0	3.93 (0.73)
English Language	5.3	31.6	31.6	21.1	10.5	3.00 (1.11)
Mathematics	0.0	55.6	11.1	33.3	0.0	3.22 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	20.0	20.0	0.0	3.60 (1.14)
History	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
Geography	0.0	28.6	28.6	0.0	42.9	2.43 (1.40)
Civic Education	0.0	16.7	33.3	0.0	50.0	2.17 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Physics	50.0	0.0	0.0	50.0	0.0	3.50 (2.12)
Biology	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
Human Culture	0.0	0.0	50.0	0.0	50.0	2.00 (1.41)

Item IIB2 2: To what degree does your assessment plan reflect balanced emphasis among conceptual schemes, process skills, social aspects of social studies, and values and attitudes?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	25.0	50.0	16.7	2.25 (0.87)
Arabic Language	14.3	71.4	7.1	7.1	0.0	3.93 (0.73)
English Language	0.0	26.3	36.8	26.3	10.5	2.79 (0.98)
Mathematics	0.0	22.2	55.6	11.1	11.1	2.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	33.3	0.0	50.0	16.7	0.0	3.50 (1.23)
History	0.0	75.0	25.0	0.0	0.0	3.75 (0.46)
Geography	0.0	28.6	57.1	14.3	0.0	3.14 (0.69)
Civic Education	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Physics	50.0	50.0	0.0	0.0	0.0	4.50 (0.71)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIB2 3: To what degree have secondary school teachers received In-Service or other training regarding assessment and performance measure?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	41.7	41.7	8.3	2.50 (0.80)
Arabic Language	13.3	40.0	26.7	6.7	13.3	3.33 (1.23)
English Language	0.0	52.6	36.8	5.3	5.3	3.37 (0.83)
Mathematics	0.0	22.2	55.6	11.1	11.1	2.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	0.0	40.0	0.0	60.0	0.0	2.80 (1.10)
History	0.0	12.5	62.5	25.0	0.0	2.88 (0.64)
Geography	0.0	0.0	71.4	14.3	14.3	2.57 (0.79)
Civic Education	0.0	0.0	33.3	50.0	16.7	2.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIB2 4: To what extent do you provide a continual (daily, lesson-by-lesson, or unit-by-unit) evaluation of students in a formative manner?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	58.3	41.7	1.58 (0.52)
Arabic Language	46.7	33.3	6.7	13.3	0.0	4.13 (1.06)
English Language	10.5	10.5	31.6	42.1	5.3	2.79 (1.08)
Mathematics	11.1	77.8	11.1	0.0	0.0	4.00 (0.50)
Specialized Subject Matters in The Arts						
General Sciences	33.3	50.0	0.0	16.7	0.0	4.00 (1.10)
History	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)
Geography	42.9	14.3	14.3	14.3	14.3	3.57 (1.62)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	83.3	16.7	0.0	3.83 (0.41)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIB2 5a: To what degree do your tests assess recall of facts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	83.3	16.7	1.83 (0.39)
Arabic Language	21.4	57.1	21.4	0.0	0.0	4.00 (0.68)
English Language	5.3	21.1	31.6	31.6	10.5	2.79 (1.08)
Mathematics	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	40.0	40.0	20.0	0.0	0.0	4.20 (0.84)
History	25.0	62.5	12.5	0.0	0.0	4.13 (0.64)
Geography	71.4	0.0	28.6	0.0	0.0	4.43 (0.98)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	0.0	16.7	0.0	3.83 (0.98)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IIB2 5b: To what degree do your tests assess comprehension?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	25.0	41.7	25.0	2.17 (0.94)
Arabic Language	28.6	57.1	14.3	0.0	0.0	4.14 (0.66)
English Language	15.8	52.6	31.6	0.0	0.0	3.84 (0.69)
Mathematics	22.2	33.3	11.1	33.3	0.0	3.44 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	25.0	25.0	50.0	0.0	0.0	3.75 (0.89)
Geography	14.3	42.9	28.6	0.0	14.3	3.43 (1.27)
Civic Education	16.7	16.7	33.3	16.7	16.7	3.00 (1.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIB2 5c: To what degree do your tests assess ability to analyze?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	41.7	25.0	16.7	2.58 (1.00)
Arabic Language	28.6	50.0	21.4	0.0	0.0	4.07 (0.73)
English Language	0.0	10.5	36.8	42.1	10.5	2.47 (0.84)
Mathematics	0.0	66.7	0.0	33.3	0.0	3.33 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	16.7	16.7	50.0	0.0	16.7	3.17 (1.33)
History	12.5	37.5	37.5	12.5	0.0	3.50 (0.93)
Geography	0.0	0.0	85.7	0.0	14.3	2.71 (0.76)
Civic Education	16.7	0.0	33.3	33.3	16.7	2.67 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIB2 5d: To what degree do your tests assess ability to apply?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	50.0	16.7	16.7	2.67 (0.99)
Arabic Language	21.4	50.0	28.6	0.0	0.0	3.93 (0.73)
English Language	0.0	5.3	57.9	21.1	15.8	2.53 (0.84)
Mathematics	0.0	66.7	11.1	11.1	11.1	3.33 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	16.7	16.7	50.0	16.7	0.0	3.33 (1.03)
History	12.5	37.5	37.5	12.5	0.0	3.50 (0.93)
Geography	0.0	14.3	71.4	0.0	14.3	2.86 (0.90)
Civic Education	16.7	0.0	16.7	50.0	16.7	2.50 (1.38)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIB2 5e: To what degree do your tests assess problem-solving?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	25.0	25.0	33.3	8.3	2.92 (1.17)
Arabic Language	7.1	42.9	35.7	14.3	0.0	3.43 (0.85)
English Language	0.0	10.5	21.1	36.8	31.6	2.11 (0.99)
Mathematics	11.1	33.3	22.2	11.1	22.2	3.00 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	16.7	16.7	16.7	3.33 (1.63)
History	12.5	12.5	50.0	25.0	0.0	3.13 (0.99)
Geography	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
Civic Education	0.0	16.7	33.3	16.7	33.3	2.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Physics	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
Biology	25.0	0.0	25.0	50.0	0.0	3.00 (1.41)
Human Culture	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)

Item IIB2 6: To what extent is assessment of student achievement made interms of success in meeting objectives specified by the curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	58.3	16.7	2.17 (0.84)
Arabic Language	21.4	35.7	35.7	7.1	0.0	3.71 (0.91)
English Language	5.3	15.8	47.4	26.3	5.3	2.90 (0.94)
Mathematics	0.0	55.6	33.3	11.1	0.0	3.44 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	33.3	0.0	16.7	3.17 (1.17)
History	0.0	62.5	25.0	12.5	0.0	3.50 (0.76)
Geography	0.0	14.3	71.4	14.3	0.0	3.00 (0.58)
Civic Education	0.0	16.7	50.0	16.7	16.7	2.67 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIB2 7: To what extent is student assessment used in revising and improving instructional activities?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	33.3	33.3	25.0	2.25 (0.97)
Arabic Language	14.3	42.9	35.7	7.1	0.0	3.64 (0.84)
English Language	0.0	21.1	36.8	26.3	15.8	2.63 (1.01)
Mathematics	0.0	44.4	33.3	11.1	11.1	3.11 (1.05)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	16.7	16.7	16.7	3.33 (1.63)
History	12.5	37.5	50.0	0.0	0.0	3.63 (0.74)
Geography	0.0	14.3	71.4	14.3	0.0	3.00 (0.58)
Civic Education	0.0	0.0	66.7	33.3	0.0	2.67 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

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Item IIB2 8a: To what degree do you prefer that the tests in secondary school be made by teachers?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	8.3	33.3	41.7	2.00 (1.13)
Arabic Language	57.1	7.1	21.4	7.1	7.1	4.00 (1.36)
English Language	27.8	38.9	22.2	11.1	0.0	3.83 (0.99)
Mathematics	33.3	33.3	11.1	11.1	11.1	3.67 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	60.0	40.0	0.0	0.0	0.0	4.60 (0.55)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
Civic Education	50.0	33.3	0.0	16.7	0.0	4.17 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	60.0	20.0	20.0	0.0	3.40 (0.89)
Physics	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.71)
Human Culture	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)

Item IIB2 8b: To what degree do you prefer that the tests in secondary school be made by the school?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	41.7	33.3	2.00 (0.95)
Arabic Language	15.4	61.5	0.0	15.4	7.7	3.62 (1.19)
English Language	16.7	5.6	44.4	11.1	22.2	2.83 (1.34)
Mathematics	0.0	44.4	33.3	0.0	22.2	3.00 (1.23)
Specialized Subject Matters in The Arts						
General Sciences	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
History	16.7	50.0	0.0	0.0	33.3	3.17 (1.72)
Geography	20.0	40.0	20.0	0.0	20.0	3.40 (1.52)
Civic Education	0.0	33.3	33.3	0.0	33.3	2.67 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
Physics	0.0	50.0	50.0	0.0	0.0	3.50 (0.71)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.71)
Human Culture	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)

Item IIB2 8c: To what degree do you prefer that the tests in secondary school be made by the school district?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	16.7	16.7	25.0	41.7	2.08 (1.17)
Arabic Language	53.8	15.4	0.0	7.7	23.1	3.69 (1.75)
English Language	5.9	29.4	17.6	29.4	17.6	2.77 (1.25)
Mathematics	22.2	0.0	33.3	22.2	22.2	2.78 (1.48)
Specialized Subject Matters in The Arts						
General Sciences	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
History	16.7	0.0	50.0	0.0	33.3	2.67 (1.51)
Geography	50.0	0.0	33.3	0.0	16.7	3.67 (1.63)
Civic Education	33.3	0.0	0.0	33.3	33.3	2.67 (1.86)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	50.0	0.0	50.0	0.0	0.0	4.00 (1.41)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

Item IIB2 9: To what degree do the existing examinations in your school and school district account for individual differences of students?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	8.3	58.3	33.3	1.75 (0.62)
Arabic Language	33.3	40.0	20.0	6.7	0.0	4.00 (0.93)
English Language	5.3	21.1	36.8	31.6	5.3	2.90 (0.99)
Mathematics	0.0	88.9	11.1	0.0	0.0	3.89 (0.33)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
History	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
Geography	28.6	14.3	42.9	0.0	14.3	3.43 (1.40)
Civic Education	16.7	0.0	66.7	0.0	16.7	3.00 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIB2 10: To what extent do tests contain a few items simple enough for all students to answer?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	41.7	33.3	2.00 (0.95)
Arabic Language	20.0	53.3	13.3	13.3	0.0	3.80 (0.94)
English Language	26.3	36.8	26.3	10.5	0.0	3.79 (0.98)
Mathematics	11.1	88.9	0.0	0.0	0.0	4.11 (0.33)
Specialized Subject Matters in The Arts						
General Sciences	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIB2 11: To what extent are the tests designed to avoid reading rate and comprehension contamination?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	8.3	58.3	25.0	2.00 (0.85)
Arabic Language	21.4	42.9	28.6	7.1	0.0	3.79 (0.89)
English Language	0.0	15.8	57.9	15.8	10.5	2.79 (0.86)
Mathematics	11.1	77.8	0.0	11.1	0.0	3.89 (0.78)
Specialized Subject Matters in The Arts						
General Sciences	33.3	33.3	16.7	16.7	0.0	3.83 (1.17)
History	37.5	25.0	25.0	0.0	12.5	3.75 (1.39)
Geography	42.9	0.0	42.9	0.0	14.3	3.57 (1.51)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IIB2 12: To what degree are the tests representative of different test item types (eg. true-false, completions, multiple choice, etc.)?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	16.7	33.3	50.0	1.67 (0.78)
Arabic Language	21.4	57.1	7.1	14.3	0.0	3.86 (0.95)
English Language	31.6	47.4	21.1	0.0	0.0	4.11 (0.74)
Mathematics	33.3	44.4	11.1	11.1	0.0	4.00 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
History	75.0	12.5	12.5	0.0	0.0	4.63 (0.74)
Geography	57.1	42.9	0.0	0.0	0.0	4.57 (0.54)
Civic Education	33.3	33.3	0.0	33.3	0.0	3.67 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Biology	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Human Culture	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)

Item IIB2 13: To what degree are the test instructions clear and explicit?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.60)
Arabic Language	21.4	57.1	21.4	0.0	0.0	4.00 (0.68)
English Language	10.5	52.6	36.8	0.0	0.0	3.74 (0.65)
Mathematics	22.2	55.6	11.1	11.1	0.0	3.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	50.0	0.0	33.3	16.7	0.0	3.83 (1.33)
History	25.0	62.5	12.5	0.0	0.0	4.13 (0.64)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIB2 14: To what extent are the test items clear and concise?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	0.0	58.3	41.7	1.58 (0.52)
Arabic Language	35.7	35.7	28.6	0.0	0.0	4.07 (0.83)
English Language	5.3	52.6	36.8	5.3	0.0	3.58 (0.69)
Mathematics	11.1	77.8	0.0	11.1	0.0	3.89 (0.78)
Specialized Subject Matters in The Arts						
General Sciences	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
History	37.5	50.0	12.5	0.0	0.0	4.25 (0.71)
Geography	42.9	14.3	42.9	0.0	0.0	4.00 (1.00)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIB2 15: To what degree does the teacher explain to the students the specific competencies (i.e., behaviors, skills, and concepts) that the students are to attain?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	33.3	66.7	0.0	2.33 (0.49)
Arabic Language	21.4	42.9	28.6	7.1	0.0	3.79 (0.89)
English Language	0.0	31.6	26.3	36.8	5.3	2.84 (0.96)
Mathematics	11.1	55.6	22.2	11.1	0.0	3.67 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	0.0	80.0	0.0	20.0	0.0	3.60 (0.89)
History	12.5	50.0	25.0	12.5	0.0	3.63 (0.92)
Geography	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
Civic Education	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Physics	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

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Item IIB2 16a: To what degree are test grades based on criterion reference?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	16.7	16.7	50.0	8.3	2.67 (1.16)
Arabic Language	20.0	46.7	33.3	0.0	0.0	3.87 (0.74)
English Language	0.0	11.1	61.1	11.1	16.7	2.67 (0.91)
Mathematics	0.0	66.7	11.1	11.1	11.1	3.33 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	16.7	0.0	33.3	3.17 (1.84)
History	25.0	12.5	50.0	0.0	12.5	3.38 (1.30)
Geography	0.0	42.9	28.6	0.0	28.6	2.86 (1.35)
Civic Education	0.0	16.7	16.7	33.3	33.3	2.17 (1.17)
Specialized Subject Matters in the Sciences						
Chemistry	0.0	0.0	33.3	33.3	33.3	2.00 (0.89)
Physics	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)
Biology	25.0	0.0	25.0	0.0	50.0	2.50 (1.92)
Human Culture	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)

Item IIB2 16b: To what degree are test grades based on normative reference?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	50.0	41.7	1.67 (0.65)
Arabic Language	33.3	40.0	20.0	6.7	0.0	4.00 (0.93)
English Language	5.3	42.1	42.1	10.5	0.0	3.42 (0.77)
Mathematics	22.2	55.6	11.1	0.0	11.1	3.78 (1.20)
Specialized Subject Matters in The Arts						
General Sciences	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
History	62.5	25.0	0.0	12.5	0.0	4.38 (1.06)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

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Item IIB2 17a: To what extent is the assessment method used throughout instruction designed to provide interim reports of student progress?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	41.7	33.3	1.92 (0.79)
Arabic Language	26.7	33.3	20.0	13.3	6.7	3.60 (1.24)
English Language	5.3	36.8	42.1	10.5	5.3	3.26 (0.93)
Mathematics	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	20.0	0.0	80.0	0.0	0.0	3.40 (0.89)
History	12.5	50.0	12.5	25.0	0.0	3.50 (1.07)
Geography	0.0	57.1	28.6	14.3	0.0	3.43 (0.79)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIB2 17b: To what extent is the assessment method used throughout instruction designed to provide specific diagnoses of student strengths and weaknesses?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	25.0	25.0	41.7	2.00 (1.04)
Arabic Language	33.3	33.3	20.0	6.7	6.7	3.80 (1.21)
English Language	0.0	21.1	21.1	57.9	0.0	2.63 (0.83)
Mathematics	0.0	77.8	22.2	0.0	0.0	3.78 (0.44)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	0.0	75.0	25.0	0.0	0.0	3.75 (0.46)
Geography	0.0	28.6	57.1	14.3	0.0	3.14 (0.69)
Civic Education	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

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Item IIB2 17c: To what extent is the assessment method used throughout instruction designed to provide information to both the student and the teacher?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	50.0	16.7	33.3	2.17 (0.94)
Arabic Language	28.6	28.6	35.7	7.1	0.0	3.79 (0.98)
English Language	0.0	26.3	42.1	31.6	0.0	2.95 (0.78)
Mathematics	0.0	66.7	22.2	11.1	0.0	3.56 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	37.5	25.0	37.5	0.0	0.0	4.00 (0.93)
Geography	0.0	42.9	57.1	0.0	0.0	3.43 (0.54)
Civic Education	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIB2 18: To what degree are final tests used to provide a basis on which grades for the course are assigned?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	8.3	41.7	41.7	1.83 (0.94)
Arabic Language	35.7	50.0	7.1	7.1	0.0	4.14 (0.86)
English Language	10.5	42.1	26.3	15.8	5.3	3.37 (1.07)
Mathematics	0.0	77.8	11.1	0.0	11.1	3.56 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	50.0	16.7	33.3	0.0	0.0	4.17 (0.98)
History	25.0	50.0	25.0	0.0	0.0	4.00 (0.76)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	33.3	50.0	0.0	16.7	0.0	4.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	0.0	33.3	0.0	3.50 (1.23)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIB2 19: To what degree are tests used to provide data from which reports to parents and transcripts are prepared?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	58.3	41.7	1.58 (0.52)
Arabic Language	21.4	64.3	14.3	0.0	0.0	4.07 (0.62)
English Language	21.1	26.3	21.1	21.1	10.5	3.26 (1.33)
Mathematics	22.2	77.8	0.0	0.0	0.0	4.22 (0.44)
Specialized Subject Matters in The Arts						
General Sciences	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	50.0	37.5	12.5	0.0	0.0	4.38 (0.74)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)

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Part II Section B: Part 2
Classroom Activities: Student Assessment
(Administrator)

Item IIB2	Response*					
	5	4	3	2	1	Mean (sd)
	%	%	%	%	%	
1. To what degree does your teachers student assessment plan use techniques and instruments such as the following:						
a. non-written performance tests?	6.9	16.7	33.3	25.0	18.1	2.69 (1.16)
b. objective tests?	24.7	54.8	13.7	4.1	2.7	3.95 (0.90)
c. essay examinations?	19.4	38.9	31.9	9.7	0.0	3.68 (0.90)
d. teacher observation?	11.3	28.2	35.2	16.9	8.5	3.17 (1.11)
2. To what degree does your assessment plan reflect balanced emphasis among conceptual schemes, process skills, social aspects of social studies, and values and attitudes?	17.6	50.0	20.3	10.8	1.4	3.72 (0.93)
3. To what degree have secondary school teachers received In-Service or other training regarding assessment and performance measures?	4.0	37.3	33.3	20.0	5.3	3.15 (0.97)
4. To what extent do your teachers provide a continual (daily, lesson-by-lesson, or unit-by-unit) evaluation of students in a formative manner?	26.7	50.7	14.7	6.7	1.3	3.95 (0.90)
5. To what degree do your teachers tests access:						
a. recall of facts?	32.4	52.7	10.8	4.1	0.0	4.14 (0.76)
b. comprehension?	24.0	53.3	16.0	4.0	2.7	3.92 (0.90)
c. ability to analyze?	17.6	35.1	32.4	9.5	5.4	3.50 (1.06)
d. ability to apply?	13.7	45.2	28.8	6.8	5.5	3.55 (1.00)
e. problem-solving?	12.3	26.0	35.6	16.4	9.6	3.15 (1.14)
6. To what extent is assessment of studdent achievement made in terms of success in meeting objectives specified by the curriculum?	10.7	46.7	29.3	12.0	1.3	3.53 (0.89)
7. To what extent is student assessment used in revising and improving instructional activities?	9.5	32.4	36.5	17.6	4.1	3.26 (0.99)
8. To what degree do you prefer that the tests in secopndary school be made by:						
a. teachers?	44.4	20.6	15.9	11.1	7.9	3.83 (1.33)
b. the school?	22.0	28.8	25.4	11.9	11.9	3.37 (1.29)
c. the school district?	38.5	16.9	23.1	7.7	13.8	3.59 (1.42)
9. To what degree do the existing examinations in your school and school district account for individual differences of students?	21.3	48.0	24.0	5.3	1.3	3.83 (0.88)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item IIB	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent do tests contain a few items simple enough for all students to answer?	11.0	46.6	34.2	6.8	1.4	3.59 (0.83)
11. To what extent are tests designed to avoid reading rate and comprehension contamination?	6.8	49.3	30.1	12.3	1.4	3.48 (0.85)
12. To what degree are the tests representative of different test item types (eg. true-false, completions, multiple choice, etc.)?	29.7	45.9	18.9	4.1	1.4	3.99 (0.88)
13. To what degree are test instructions clear and explicit?	21.6	59.5	13.5	5.4	0.0	3.97 (0.76)
14. To what extent are the test items clear and concise?	21.3	52.0	20.0	5.3	1.3	3.87 (0.86)
15. To what degree do your teachers explain to the students the specific competencies (i.e., behaviors, skills, and concepts) that the students are to attain?	12.2	36.5	35.1	12.2	4.1	3.41 (0.99)
16. To what degree are test grades based on:						
a. criterion reference?	12.3	15.4	29.2	23.1	20.0	2.77 (1.28)
b. normative reference?	67.6	20.3	9.5	1.4	1.4	4.51 (0.83)
17. To what extent is the assessment method used throughout instruction designed to provide:						
a. interim reports of student progress?	40.5	28.4	21.6	9.5	0.0	4.00 (1.01)
b. specific diagnoses of student strengths and weaknesses?	29.3	44.0	24.0	2.7	0.0	4.00 (0.81)
c. information to both the student and the teacher?	23.6	36.1	29.2	11.1	0.0	3.72 (0.95)
18. To what degree are final tests used to provide a basis on which grades for the course are assigned?	41.9	28.4	23.0	2.7	4.1	4.01 (1.07)
19. To what degree are tests used to provide data from which reports to parents and transcripts are prepared?	54.7	29.3	13.3	1.3	1.3	4.35 (0.86)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part II Section C: Part 1
Human and Physical Resources: Staff
(Teacher)

Item IIC1 1: To what degree are non-specialized teachers used to teach in the secondary school?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	13.9	22.8	17.7	20.3	25.3	2.80 (1.41)
Arabic Language	7.9	13.2	19.3	18.4	41.2	2.28 (1.33)
English Language	0.9	11.5	31.0	20.4	36.3	2.20 (1.09)
Mathematics	4.6	10.1	10.1	21.1	54.1	1.90 (1.21)
Specialized Subject Matters in The Arts						
General Sciences	7.1	25.0	28.6	10.7	28.6	2.71 (1.33)
History	14.5	19.4	24.2	12.9	29.0	2.77 (1.43)
Geography	6.8	24.7	23.3	9.6	35.6	2.58 (1.37)
Civic Education	5.0	37.5	20.0	17.5	20.0	2.90 (1.26)
Specialized Subject Matters in The Sciences						
Chemistry	5.5	18.2	25.5	25.5	25.5	2.53 (1.22)
Physics	3.5	8.8	28.1	24.6	35.1	2.21 (1.13)
Biology	4.2	18.2	22.9	27.1	27.1	2.46 (1.20)
Human Culture	12.1	21.2	18.2	30.3	18.2	2.79 (1.32)

Item IIC1 2: To what extent does your school district have sufficient number of qualified supervisory personnel to assist in implementing the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	36.2	31.3	11.2	11.2	10.0	3.73 (1.33)
Arabic Language	38.8	31.0	19.0	6.0	5.2	3.92 (1.14)
English Language	29.6	40.0	25.2	5.2	0.0	3.94 (0.87)
Mathematics	21.1	36.7	22.9	12.8	6.4	3.53 (1.15)
Specialized Subject Matters in The Arts						
General Sciences	7.1	57.1	25.0	7.1	3.6	3.57 (0.88)
History	43.5	22.6	14.5	14.5	4.8	3.86 (1.27)
Geography	31.1	29.7	14.9	9.5	14.9	3.53 (1.41)
Civic Education	37.5	32.5	10.0	20.0	0.0	3.88 (1.14)
Specialized Subject Matters in The Sciences						
Chemistry	10.9	54.5	20.0	10.9	3.6	3.58 (0.96)
Physics	29.8	28.1	17.5	17.5	7.0	3.56 (1.28)
Biology	20.8	43.8	20.8	10.4	4.2	3.67 (1.06)
Human Culture	36.4	6.1	27.3	18.2	12.1	3.36 (1.45)

Item IIC1 3: To what degree are secondary school teachers given released time for In-Service training to implement the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	14.1	17.9	41.0	17.9	9.0	3.10 (1.14)
Arabic Language	11.3	17.4	25.2	20.0	26.1	2.68 (1.34)
English Language	13.3	30.1	38.9	12.4	5.3	3.34 (1.03)
Mathematics	5.7	18.9	21.7	25.5	28.3	2.48 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	14.3	21.4	17.9	25.0	21.4	2.82 (1.39)
History	11.1	14.3	19.0	20.6	34.9	2.46 (1.39)
Geography	12.2	13.5	18.9	20.3	35.1	2.47 (1.41)
Civic Education	13.2	26.3	31.6	15.8	13.2	3.11 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	3.6	10.9	32.7	20.0	32.7	2.33 (1.16)
Physics	5.4	19.6	26.8	21.4	26.8	2.55 (1.24)
Biology	2.0	24.5	36.7	16.3	20.4	2.71 (1.12)
Human Culture	15.6	12.5	37.5	18.8	15.6	2.94 (1.27)

Item IIC1 4: To what extent does the Ministry of Education contribute to the professional improvement of the secondary school teachers?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	.4 %	3 %	2 %	1 %	
Islamic Education	27.8	24.1	22.8	15.2	10.1	3.44 (1.32)
Arabic Language	19.1	27.8	28.7	14.8	9.6	3.32 (1.22)
English Language	4.4	36.8	33.3	15.8	9.6	3.11 (1.04)
Mathematics	8.4	28.0	32.7	13.1	17.8	2.96 (1.21)
Specialized Subject Matters in The Arts						
General Sciences	17.9	28.6	17.9	25.0	10.7	3.18 (1.31)
History	29.0	24.2	21.0	16.1	9.7	3.47 (1.33)
Geography	13.9	26.4	31.9	12.5	15.3	3.11 (1.25)
Civic Education	34.2	26.3	10.5	21.1	7.9	3.58 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	9.1	38.2	27.3	18.2	7.3	3.24 (1.09)
Physics	10.9	29.1	30.9	21.8	7.3	3.15 (1.11)
Biology	16.7	45.8	22.9	8.3	6.3	3.58 (1.07)
Human Culture	34.4	28.1	12.5	12.5	12.5	3.59 (1.41)

Item IIC1 5: How adequate are the school's policies for reviewing teacher assignments in terms of academic teaching and other qualifications?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	23.7	35.0	26.2	12.5	2.5	3.65 (1.06)
Arabic Language	19.0	36.2	22.4	14.7	7.8	3.44 (1.18)
English Language	2.8	29.6	37.0	20.4	10.2	2.94 (1.01)
Mathematics	22.7	31.8	26.4	5.5	13.6	3.45 (1.28)
Specialized Subject Matters in The Arts						
General Sciences	17.9	25.0	32.1	7.1	17.9	3.18 (1.34)
History	28.6	31.7	15.9	15.9	7.9	3.57 (1.28)
Geography	20.8	30.6	22.2	15.3	11.1	3.35 (1.28)
Civic Education	39.5	31.6	7.9	7.9	13.2	3.76 (1.40)
Specialized Subject Matters in The Sciences						
Chemistry	18.2	41.8	30.9	1.8	7.3	3.62 (1.05)
Physics	27.3	29.1	25.5	16.4	1.8	3.64 (1.11)
Biology	22.0	38.0	24.0	10.0	6.0	3.60 (1.13)
Human Culture	34.4	21.9	21.9	12.5	9.4	3.59 (1.34)

Item IIC1 6: To what degree does your school district conduct In-Service workshops in implementing the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	18.8	26.2	35.0	12.5	7.5	3.36 (1.15)
Arabic Language	20.9	33.9	24.3	12.2	8.7	3.46 (1.20)
English Language	7.0	38.3	39.1	10.4	5.2	3.31 (0.94)
Mathematics	11.8	28.2	36.4	17.3	6.4	3.22 (1.07)
Specialized Subject Matters in The Arts						
General Sciences	25.0	21.4	28.6	21.4	3.6	3.43 (1.20)
History	24.2	22.6	32.3	14.5	6.5	3.44 (1.20)
Geography	20.3	20.3	29.7	17.6	12.2	3.19 (1.29)
Civic Education	34.2	23.7	21.1	13.2	7.9	3.63 (1.30)
Specialized Subject Matters in The Sciences						
Chemistry	9.1	34.5	32.7	16.4	7.3	3.22 (1.07)
Physics	12.5	37.5	32.1	16.1	1.8	3.43 (0.97)
Biology	14.0	42.0	30.0	6.0	8.0	3.48 (1.07)
Human Culture	28.1	15.6	28.1	18.8	9.4	3.34 (1.34)

Item IIC1 7: To what extent have the preparatory school teachers participated in seminars, In-service training and workshops dealing with recent developments in education?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.2	33.7	21.2	17.5	11.2	3.26 (1.25)
Arabic Language	23.5	33.0	29.6	9.6	4.3	3.62 (1.08)
English Language	8.6	44.0	31.9	7.8	7.8	3.38 (1.02)
Mathematics	12.7	29.1	33.6	15.5	9.1	3.21 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	25.0	28.6	28.6	10.7	7.1	3.54 (1.20)
History	22.2	22.2	22.2	23.8	9.5	3.24 (1.30)
Geography	26.0	19.2	26.0	20.5	8.2	3.34 (1.29)
Civic Education	28.9	26.3	21.1	21.1	2.6	3.58 (1.20)
Specialized Subject Matters in The Sciences						
Chemistry	12.7	34.5	18.2	23.6	10.9	3.15 (1.24)
Physics	17.9	32.1	32.1	14.3	3.6	3.46 (1.06)
Biology	14.0	34.0	34.0	14.0	4.0	3.40 (1.03)
Human Culture	18.8	21.9	28.1	15.6	15.6	3.13 (1.34)

Item IIC1 8: To what extent do teachers work with other teachers to coordinate teaching according to the Omani curriculum quidelines?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	21.5	31.6	19.0	20.3	7.6	3.39 (1.25)
Arabic Language	18.4	28.1	31.6	11.4	10.5	3.33 (1.21)
English Language	10.4	33.9	32.2	15.7	7.8	3.24 (1.09)
Mathematics	11.0	28.4	32.1	13.8	14.7	3.07 (1.21)
Specialized Subject Matters in The Arts						
General Sciences	22.2	22.2	29.6	22.2	3.7	3.37 (1.18)
History	21.0	27.4	25.8	12.9	12.9	3.31 (1.30)
Geography	21.9	30.1	24.7	13.7	9.6	3.41 (1.25)
Civic Education	38.5	28.2	12.8	15.4	5.1	3.80 (1.26)
Specialized Subject Matters in The Sciences						
Chemistry	11.1	35.2	31.5	16.7	5.6	3.30 (1.06)
Physics	10.9	38.2	29.1	10.9	10.9	3.27 (1.15)
Biology	16.3	36.7	26.5	14.3	6.1	3.43 (1.12)
Human Culture	28.1	21.9	15.6	25.0	9.4	3.34 (1.38)

Item IIC1 9: How adequate do you think the preparation of the teachers in learning theory and current teaching methods is in order to implement the Omani curriculum?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	20.3	34.2	25.3	15.2	5.1	3.49 (1.13)
Arabic Language	14.9	46.5	20.2	14.0	4.4	3.54 (1.05)
English Language	5.3	4.2	42.5	6.2	1.8	3.45 (0.77)
Mathematics	15.7	42.6	31.5	4.6	5.6	3.58 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	32.1	35.7	25.0	7.1	0.0	3.93 (0.94)
History	21.3	41.0	23.0	9.8	4.9	3.64 (1.08)
Geography	32.9	32.9	21.9	9.6	2.7	3.84 (1.08)
Civic Education	36.8	42.1	13.2	5.3	2.6	4.05 (0.99)
Specialized Subject Matters in The Sciences						
Chemistry	16.4	41.8	34.5	1.8	5.5	3.62 (0.97)
Physics	20.4	40.7	29.6	9.3	0.0	3.72 (0.90)
Biology	12.5	50.0	25.0	10.4	2.1	3.60 (0.92)
Human Culture	32.3	22.6	29.0	6.5	9.7	3.61 (1.28)

Item IIC1 10: How adequate do you think the professional preparation of the teachers is, with regard to the subject-matter?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	19.2	38.5	25.6	14.1	2.6	3.58 (1.04)
Arabic Language	15.0	56.1	17.8	7.5	3.7	3.71 (0.94)
English Language	12.9	46.6	30.2	8.6	1.7	3.60 (0.88)
Mathematics	16.7	36.1	33.3	7.4	6.5	3.49 (1.06)
Specialized Subject Matters in The Arts						
General Sciences	25.0	39.3	21.4	10.7	3.6	3.71 (1.08)
History	35.6	37.3	22.0	3.4	1.7	4.02 (0.94)
Geography	25.7	45.9	23.0	5.4	0.0	3.92 (0.84)
Civic Education	43.6	35.9	17.9	2.6	0.0	4.21 (0.83)
Specialized Subject Matters in The Sciences						
Chemistry	12.7	56.4	25.5	5.5	0.0	3.76 (0.74)
Physics	14.8	38.9	42.6	3.7	0.0	3.65 (0.78)
Biology	17.0	53.2	21.3	6.4	2.1	3.77 (0.89)
Human Culture	28.1	40.6	18.8	9.4	3.1	3.81 (1.06)

Part II Section C: Part 1
Human and Physical Resources: Staff
(Supervisor)

Item IIC1 1: To what degree are non-specialized teachers used to teach in the secondary school?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	33.3	8.3	33.3	0.0	3.50 (1.24)
Arabic Language	6.3	18.8	12.5	18.8	43.8	2.25 (1.39)
English Language	0.0	0.0	22.2	11.1	66.7	1.56 (0.86)
Mathematics	11.1	22.2	11.1	33.3	22.2	2.67 (1.41)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	20.0	0.0	40.0	2.80 (1.79)
History	0.0	0.0	42.9	14.3	42.9	2.00 (1.00)
Geography	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
Civic Education	0.0	16.7	33.3	16.7	33.3	2.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	0.0	50.0	33.3	2.00 (1.10)
Physics	0.0	33.3	0.0	0.0	66.7	2.00 (1.73)
Biology	25.0	0.0	0.0	25.0	50.0	2.25 (1.89)
Human Culture	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)

Item IIC1 2: To what extent does your school district have sufficient number of qualified supervisory personnel to assist in implementing the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	25.0	50.0	1.75 (0.87)
Arabic Language	31.3	50.0	6.3	6.3	6.3	3.94 (1.12)
English Language	36.8	21.1	36.8	5.3	0.0	3.90 (0.99)
Mathematics	0.0	44.4	44.4	11.1	0.0	3.33 (0.71)
Specialized Subject Matters in The Arts						
General Sciences	20.0	20.0	0.0	20.0	40.0	2.60 (1.82)
History	14.3	14.3	28.6	14.3	28.6	2.71 (1.50)
Geography	0.0	28.6	14.3	28.6	28.6	2.43 (1.27)
Civic Education	16.7	16.7	0.0	50.0	16.7	2.67 (1.51)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	16.7	16.7	16.7	3.00 (1.27)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	25.0	25.0	0.0	25.0	25.0	3.00 (1.83)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIC1 3: To what degree are secondary school teachers given released time for In-Service training to implement the Omani curriculum?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	16.7	50.0	25.0	0.0	3.08 (0.90)
Arabic Language	13.3	40.0	26.7	6.7	13.3	3.33 (1.23)
English Language	26.3	36.8	31.6	5.3	0.0	3.84 (0.90)
Mathematics	0.0	33.3	33.3	11.1	22.2	2.78 (1.20)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	0.0	16.7	33.3	2.83 (1.72)
History	0.0	25.0	62.5	0.0	12.5	3.00 (0.93)
Geography	0.0	0.0	14.3	42.9	42.9	1.71 (0.76)
Civic Education	0.0	0.0	33.3	33.3	33.3	2.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	33.3	50.0	0.0	2.67 (0.82)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIC1 4: To what extent does the Ministry of Education contribute to the professional improvement of the secondary school teachers?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	25.0	66.7	0.0	2.42 (0.67)
Arabic Language	13.3	73.3	6.7	6.7	0.0	3.93 (0.70)
English Language	16.7	33.3	33.3	16.7	0.0	3.50 (0.99)
Mathematics	0.0	55.6	22.2	22.2	0.0	3.33 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	40.0	0.0	20.0	40.0	0.0	3.40 (1.52)
History	0.0	75.0	25.0	0.0	0.0	3.75 (0.46)
Geography	14.3	28.6	28.6	14.3	14.3	3.14 (1.35)
Civic Education	0.0	16.7	50.0	16.7	16.7	2.67 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	83.3	16.7	0.0	2.83 (0.41)
Physics	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIC1 5: How adequate are the school's policies for reviewing teacher assignments in terms of academic teaching and other qualifications?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	33.3	41.7	25.0	2.08 (0.79)
Arabic Language	18.8	50.0	25.0	6.3	0.0	3.81 (0.83)
English Language	5.3	36.8	36.8	10.5	10.5	3.16 (1.07)
Mathematics	11.1	66.7	11.1	0.0	11.1	3.67 (1.12)
Specialized Subject Matters in The Arts						
General Sciences	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
History	37.5	12.5	50.0	0.0	0.0	3.88 (0.99)
Geography	14.3	57.1	14.3	14.3	0.0	3.71 (0.95)
Civic Education	33.3	16.7	16.7	33.3	0.0	3.50 (1.38)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIC1 6: To what degree does your school district conduct In-Service workshops in implementing the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	41.7	41.7	16.7	2.25 (0.75)
Arabic Language	37.5	31.3	18.8	6.3	6.3	3.88 (1.20)
English Language	10.5	36.8	36.8	15.8	0.0	3.42 (0.90)
Mathematics	11.1	55.6	22.2	11.1	0.0	3.67 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
History	0.0	37.5	62.5	0.0	0.0	3.38 (0.52)
Geography	14.3	14.3	42.9	14.3	14.3	3.00 (1.29)
Civic Education	0.0	0.0	50.0	33.3	16.7	2.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIC1 7: To what extent have the secondary school teachers participated in seminars, In-service training and workshops dealing with recent developments in education?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	41.7	25.0	25.0	2.33 (0.99)
Arabic Language	25.0	56.3	12.5	0.0	6.3	3.94 (1.00)
English Language	22.2	38.9	22.2	5.6	11.1	3.56 (1.25)
Mathematics	0.0	55.6	11.1	22.2	11.1	3.11 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	0.0	33.3	16.7	2.83 (1.33)
History	0.0	37.5	50.0	12.5	0.0	3.25 (0.71)
Geography	0.0	42.9	42.9	0.0	14.3	3.14 (1.07)
Civic Education	0.0	16.7	33.3	33.3	16.7	2.50 (1.05)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Physics	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIC1 8: To what extent do teachers work with other teachers to coordinate teaching according to the Omani curriculum quidelines?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	25.0	0.0	41.7	33.3	2.17 (1.19)
Arabic Language	18.8	43.8	18.8	12.5	6.3	3.56 (1.15)
English Language	5.6	22.2	44.4	22.2	5.6	3.00 (0.97)
Mathematics	0.0	55.6	33.3	11.1	0.0	3.44 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	0.0	50.0	0.0	3.33 (1.51)
History	0.0	25.0	50.0	25.0	0.0	3.00 (0.76)
Geography	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
Civic Education	0.0	33.3	16.7	33.3	16.7	2.67 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIC1 9: How adequate do you think the preparation of the teachers in learning theory and current teaching methods is in order to implement the Omani curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	33.3	41.7	25.0	2.08 (0.79)
Arabic Language	12.5	62.5	18.8	0.0	6.3	3.75 (0.93)
English Language	5.9	47.1	29.4	11.8	5.9	3.35 (1.00)
Mathematics	0.0	66.7	22.2	11.1	0.0	3.56 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
History	0.0	62.5	25.0	12.5	0.0	3.50 (0.76)
Geography	0.0	28.6	57.1	0.0	14.3	3.00 (1.00)
Civic Education	0.0	33.3	33.3	16.7	16.7	2.83 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIC1 10: How adequate do you think the professional preparation of the teachers is, with regard to the subject-matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	58.3	16.7	2.08 (0.67)
Arabic Language	18.8	56.3	18.8	6.3	0.0	3.88 (0.81)
English Language	10.5	47.4	26.3	15.8	0.0	3.53 (0.91)
Mathematics	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	16.7	0.0	83.3	0.0	0.0	3.33 (0.82)
History	0.0	62.5	37.5	0.0	0.0	3.63 (0.52)
Geography	0.0	28.6	71.4	0.0	0.0	3.29 (0.49)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Part II Section C: Part 1
Human and Physical resources: Staff
(Administrator)

Item IIC1	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what degree are non-specialized teachers used to teach in the secondary school?	4.1	16.2	18.9	18.9	41.9	2.22 (1.26)
2. To what extent does your school district have sufficient number of qualified supervisory personnel to assist in implementing the Omani Curriculum?	22.7	32.0	30.7	8.0	6.7	3.56 (1.13)
3. To what degree are secondary school teachers given released time for In-Service training to implement the Omani curriculum?	13.3	24.0	24.0	21.3	17.3	2.95 (1.30)
4. To what extent does the Ministry of Education contribute to the professional improvement of the secondary school teachers?	21.9	37.0	26.0	12.3	2.7	3.63 (1.05)
5. How adequate are the school's policies for reviewing teacher assignments in terms of academic teaching and other qualifications?	40.0	45.3	8.0	6.7	0.0	4.19 (0.85)
6. To what degree does your school district conduct In-Service workshops in implementing the Omani Curriculum?	24.3	43.2	23.0	8.1	1.4	3.81 (0.95)
7. To what extent have the secondary school teachers participated in seminars, In-Service training and workshops dealing with recent developments in education?	20.0	37.3	22.7	16.0	4.0	3.53 (1.11)
8. To what extent do teachers work with other teachers to coordinate teaching according to the Omani curriculum guidelines?	17.3	45.3	28.0	8.0	1.3	3.69 (0.90)
9. How adequate do you think the preparation of the teachers in learning theory and current teaching methods is in order to implement the Omani curriculum?	10.8	47.3	25.7	14.9	1.4	3.51 (0.93)
10. How adequate do you think the professional preparation of the teachers is, with regard to the subject-matter?	14.9	48.6	29.7	6.8	0.0	3.72 (0.80)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Part II Section C: Part 2
Human and Physical Resources: Equipment, Facilities, and Materials
(Teacher)

Item IIC2 1: To what extent are the classrooms adequate in number and size for the number of students in the class?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	43.8	26.2	10.0	11.2	8.7	3.85 (1.33)
Arabic Language	34.8	40.0	17.4	4.3	3.5	3.98 (1.01)
English Language	23.3	39.7	28.4	6.0	2.6	3.75 (0.97)
Mathematics	36.4	32.7	21.8	6.4	2.7	3.94 (1.04)
Specialized Subject Matters in The Arts						
General Sciences	50.0	25.0	17.9	7.1	0.0	4.18 (0.98)
History	64.5	19.4	6.5	3.2	6.5	4.32 (1.16)
Geography	46.6	27.4	13.7	6.8	5.5	4.03 (1.18)
Civic Education	47.5	30.0	17.5	2.5	2.5	4.18 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	34.5	29.1	23.6	10.9	1.8	3.84 (1.09)
Physics	33.3	36.8	21.1	7.0	1.8	3.93 (1.00)
Biology	24.5	38.8	16.3	20.4	0.0	3.67 (1.07)
Human Culture	51.5	27.3	9.1	9.1	3.0	4.15 (1.12)

Item IIC2 2a: To what degree are adequate quantities of books for teachers provided?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.2	27.5	27.5	23.7	5.0	3.26 (1.15)
Arabic Language	9.5	25.0	19.0	24.1	22.4	2.75 (1.31)
English Language	50.4	32.5	10.3	6.0	0.9	4.26 (0.93)
Mathematics	1.8	16.2	25.2	20.7	36.0	2.27 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	7.4	22.2	18.5	29.6	22.2	2.63 (1.28)
History	7.9	11.1	15.9	31.7	33.3	2.29 (1.26)
Geography	12.5	8.3	19.4	30.6	29.2	2.44 (1.33)
Civic Education	10.0	20.0	15.0	32.5	22.5	2.63 (1.31)
Specialized Subject Matters in The Sciences						
Chemistry	7.3	23.6	18.2	27.3	23.6	2.64 (1.28)
Physics	5.3	8.8	35.1	17.5	33.3	2.35 (1.19)
Biology	6.1	18.4	30.6	30.6	14.3	2.71 (1.12)
Human Culture	19.4	16.1	6.5	35.5	22.6	2.74 (1.48)

Item IIC2 2b: To what degree are adequate quantities of books for students provided?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.4	24.4	29.5	25.6	5.1	3.19 (1.14)
Arabic Language	9.6	15.8	23.7	28.9	21.9	2.62 (1.26)
English Language	50.0	35.3	12.1	2.6	0.0	4.33 (0.79)
Mathematics	2.8	9.3	26.9	29.6	31.5	2.22 (1.08)
Specialized Subject Matters in The Arts						
General Sciences	3.6	25.0	28.6	25.0	17.9	2.71 (1.15)
History	6.5	9.7	17.7	32.3	33.9	2.23 (1.21)
Geography	8.5	11.3	22.5	25.4	32.4	2.38 (1.28)
Civic Education	8.3	19.4	16.7	27.8	27.8	2.53 (1.32)
Specialized Subject Matters in The Sciences						
Chemistry	5.5	18.2	34.5	16.4	25.5	2.62 (1.21)
Physics	3.5	12.3	28.1	33.3	22.8	2.40 (1.08)
Biology	6.3	16.7	31.3	27.1	18.8	2.65 (1.16)
Human Culture	16.1	12.9	22.6	29.0	19.4	2.77 (1.36)

Item IIC2 3a: Rate the rooms where you teach your course relative to the following characteristic: Proper Ventilation.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	45.0	26.2	8.7	11.2	8.7	3.88 (1.34)
Arabic Language	47.4	24.6	21.9	3.5	2.6	4.11 (1.03)
English Language	39.5	43.9	14.9	0.9	0.9	4.20 (0.79)
Mathematics	45.9	27.9	15.3	5.4	5.4	4.04 (1.15)
Specialized Subject Matters in The Arts						
General Sciences	60.7	25.0	10.7	3.6	0.0	4.43 (0.84)
History	66.7	19.0	7.9	4.8	1.6	4.44 (0.95)
Geography	58.1	20.3	13.5	6.8	1.4	4.27 (1.02)
Civic Education	61.5	25.6	10.3	2.6	0.0	4.46 (0.79)
Specialized Subject Matters in The Sciences						
Chemistry	36.4	47.3	9.1	7.3	0.0	4.13 (0.86)
Physics	49.1	28.1	10.5	8.8	3.5	4.11 (1.13)
Biology	46.0	36.0	16.0	2.0	0.0	4.26 (0.80)
Human Culture	48.5	24.2	18.2	6.1	3.0	4.09 (1.10)

Item IIC2 3b: Rate the rooms where you teach your course relative to the following characteristic: Electrical outlets where needed.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	44.3	24.1	15.2	3.8	12.7	3.84 (1.37)
Arabic Language	46.6	26.7	12.9	8.6	5.2	4.01 (1.19)
English Language	30.4	30.4	26.1	7.0	6.1	3.72 (1.15)
Mathematics	40.2	31.3	17.0	8.0	3.6	3.96 (1.11)
Specialized Subject Matters in The Arts						
General Sciences	50.0	28.6	14.3	0.0	7.1	4.14 (1.15)
History	48.4	30.6	9.7	6.5	4.8	4.11 (1.13)
Geography	45.9	27.0	14.9	6.8	5.4	4.01 (1.18)
Civic Education	38.5	33.3	23.1	2.6	2.6	4.03 (0.99)
Specialized Subject Matters in The Sciences						
Chemistry	29.1	38.2	21.8	9.1	1.8	3.84 (1.01)
Physics	47.4	28.1	15.8	5.3	3.5	4.11 (1.08)
Biology	44.0	26.0	24.0	4.0	2.0	4.06 (1.02)
Human Culture	42.4	30.3	12.1	9.1	6.1	3.94 (1.22)

Item IIC2 3c: Rate the rooms where you teach your course relative to the following characteristic: Room darkening capability.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.9	22.1	27.3	16.9	3.9	3.57 (1.20)
Arabic Language	18.4	23.7	24.6	14.0	19.3	3.08 (1.38)
English Language	3.5	15.9	20.4	26.5	33.6	2.29 (1.19)
Mathematics	16.8	29.9	17.8	15.9	19.6	3.08 (1.39)
Specialized Subject Matters in The Arts						
General Sciences	28.6	32.1	14.3	10.7	14.3	3.50 (1.40)
History	22.2	12.7	9.5	19.0	36.5	2.65 (1.61)
Geography	17.6	16.2	23.0	17.6	25.7	2.82 (1.44)
Civic Education	12.8	28.2	12.8	17.9	28.2	2.80 (1.45)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	27.8	20.4	18.5	16.7	3.09 (1.35)
Physics	24.1	22.2	20.4	16.7	16.7	3.20 (1.42)
Biology	18.4	18.4	26.5	22.4	14.3	3.04 (1.32)
Human Culture	27.3	24.2	21.2	12.1	15.2	3.36 (1.41)

Item IIC2 3d: Rate the rooms where you teach your course relative to the following characteristic: Adequate facilities for large and small group instruction and independent study.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	28.7	27.5	21.2	21.2	1.2	3.61 (1.15)
Arabic Language	23.7	30.7	25.4	9.6	10.5	3.47 (1.25)
English Language	9.6	31.3	27.8	22.6	8.7	3.10 (1.13)
Mathematics	18.9	24.3	27.0	18.9	10.8	3.22 (1.26)
Specialized Subject Matters in The Arts						
General Sciences	22.2	18.5	44.4	7.4	7.4	3.41 (1.15)
History	17.7	22.6	22.6	12.9	24.2	2.97 (1.44)
Geography	23.3	9.6	32.9	19.2	15.1	3.07 (1.36)
Civic Education	23.7	28.9	21.1	18.4	7.9	3.42 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	12.7	21.8	41.8	18.2	5.5	3.18 (1.06)
Physics	12.3	19.3	42.1	10.5	15.8	3.02 (1.20)
Biology	12.2	24.5	32.7	18.4	12.2	3.06 (1.20)
Human Culture	21.2	30.3	24.2	15.2	9.1	3.39 (1.25)

Item IIC2 3e: Rate the rooms where you teach your course relative to the following characteristic: Adequate space for storing equipment and materials.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.5	24.4	14.1	16.7	15.4	3.36 (1.45)
Arabic Language	26.1	29.6	19.1	11.3	13.9	3.43 (1.36)
English Language	7.7	19.7	29.1	22.2	21.4	2.70 (1.23)
Mathematics	14.5	16.4	27.3	20.9	20.9	2.83 (1.33)
Specialized Subject Matters in The Arts						
General Sciences	25.0	39.3	14.3	7.1	14.3	3.54 (1.35)
History	11.1	17.5	25.4	15.9	30.2	2.64 (1.37)
Geography	23.0	8.1	9.5	31.1	28.4	2.66 (1.54)
Civic Education	17.6	20.6	17.6	17.6	26.5	2.85 (1.48)
Specialized Subject Matters in The Sciences						
Chemistry	23.6	40.0	23.6	9.1	3.6	3.71 (1.05)
Physics	21.1	45.6	15.8	5.3	12.3	3.58 (1.24)
Biology	20.8	29.2	27.1	18.8	4.2	3.44 (1.15)
Human Culture	25.0	31.3	15.6	12.5	15.6	3.38 (1.41)

Item IIC2 3f: Rate the rooms where you teach your course relative to the following characteristic: Adequate space for student project work.

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	22.8	27.8	26.6	10.1	12.7	3.38 (1.29)
Arabic Language	15.8	19.3	28.9	20.2	15.8	2.99 (1.29)
English Language	9.7	18.6	28.3	29.2	14.2	2.81 (1.19)
Mathematics	11.0	16.5	25.7	23.9	22.9	2.69 (1.30)
Specialized Subject Matters in The Arts						
General Sciences	7.1	25.0	32.1	17.9	17.9	2.86 (1.21)
History	11.3	12.9	21.0	19.4	35.5	2.45 (1.39)
Geography	16.4	6.8	11.0	27.4	38.4	2.36 (1.47)
Civic Education	21.6	27.0	13.5	21.6	16.2	3.16 (1.42)
Specialized Subject Matters in The Sciences						
Chemistry	3.6	20.0	38.2	21.8	16.4	2.73 (1.08)
Physics	5.4	26.8	30.4	17.9	19.6	2.80 (1.20)
Biology	14.0	22.0	28.0	16.0	20.0	2.94 (1.33)
Human Culture	16.1	29.0	22.6	9.7	22.6	3.07 (1.41)

Item IIC2 4: To what extent are teachers instructed in the use of equipment and materials?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	15.0	28.7	22.5	23.7	10.0	3.15 (1.23)
Arabic Language	11.5	17.7	27.4	28.3	15.0	2.82 (1.23)
English Language	13.7	39.3	22.2	13.7	11.1	3.31 (1.20)
Mathematics	5.5	15.5	20.9	33.6	24.5	2.44 (1.18)
Specialized Subject Matters in The Arts						
General Sciences	22.2	25.9	22.2	14.8	14.8	3.26 (1.38)
History	4.8	27.4	16.1	19.4	32.3	2.53 (1.33)
Geography	8.1	10.8	25.7	18.9	36.5	2.35 (1.30)
Civic Education	18.9	24.3	24.3	21.6	10.8	3.19 (1.29)
Specialized Subject Matters in The Sciences						
Chemistry	9.1	27.3	29.1	14.5	20.0	2.91 (1.27)
Physics	16.1	19.6	25.0	19.6	19.6	2.93 (1.36)
Biology	8.0	24.0	32.0	24.0	12.0	2.92 (1.14)
Human Culture	16.1	19.4	32.3	19.4	12.9	3.07 (1.26)

Item IIC2 5: To what extent are teachers responsible for the selection of equipment and materials?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.9	29.9	24.7	18.2	10.4	3.25 (1.24)
Arabic Language	13.9	27.8	32.2	16.5	9.6	3.20 (1.16)
English Language	3.5	16.7	31.6	28.1	20.2	2.55 (1.10)
Mathematics	3.8	28.3	30.2	21.7	16.0	2.82 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	14.3	28.6	28.6	25.0	3.6	3.25 (1.11)
History	25.4	22.0	20.3	16.9	15.3	3.25 (1.41)
Geography	14.1	25.4	32.4	11.3	16.9	3.09 (1.27)
Civic Education	18.4	28.9	31.6	10.5	10.5	3.34 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	9.1	25.5	29.1	21.8	14.5	2.93 (1.20)
Physics	10.7	25.0	35.7	12.5	16.1	3.02 (1.21)
Biology	14.3	24.5	36.7	18.4	6.1	3.22 (1.10)
Human Culture	12.9	35.5	22.6	19.4	9.7	3.23 (1.20)

Item IIC2 6a: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to teachers for instructional purposes?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	11.2	26.2	27.5	10.0	3.14 (1.34)
Arabic Language	9.5	22.4	24.1	20.7	23.3	2.74 (1.30)
English Language	8.7	41.7	32.2	13.9	3.5	3.38 (0.95)
Mathematics	6.5	14.8	24.1	23.1	31.5	2.42 (1.25)
Specialized Subject Matters in The Arts						
General Sciences	14.8	33.3	29.6	11.1	11.1	3.30 (1.20)
History	14.3	20.6	20.6	25.4	19.0	2.86 (1.34)
Geography	9.5	10.8	29.7	17.6	32.4	2.47 (1.31)
Civic Education	15.4	20.5	17.9	17.9	28.2	2.77 (1.46)
Specialized Subject Matters in The Sciences						
Chemistry	16.4	32.7	25.5	14.5	10.9	3.29 (1.23)
Physics	12.5	35.7	35.7	7.1	8.9	3.36 (1.09)
Biology	10.4	45.8	25.0	6.3	12.5	3.35 (1.16)
Human Culture	15.6	15.6	31.3	21.9	15.6	2.94 (1.29)

Item IIC2 6b: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to students for project work?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	18.2	20.8	29.9	19.5	11.7	3.14 (1.26)
Arabic Language	6.0	18.1	29.3	24.1	22.4	2.61 (1.19)
English Language	1.8	10.5	39.5	30.7	17.5	2.48 (0.96)
Mathematics	3.7	17.6	20.4	25.9	32.4	2.34 (1.21)
Specialized Subject Matters in The Arts						
General Sciences	11.1	18.5	25.9	29.6	14.8	2.82 (1.24)
History	6.3	15.9	25.4	25.4	27.0	2.49 (1.23)
Geography	8.2	5.5	32.9	26.0	27.4	2.41 (1.19)
Civic Education	15.4	5.1	23.1	33.3	23.1	2.56 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	5.5	14.5	34.5	21.8	23.6	2.56 (1.17)
Physics	10.9	16.4	27.3	29.1	16.4	2.76 (1.23)
Biology	4.1	20.4	34.7	20.4	20.4	2.67 (1.14)
Human Culture	13.3	16.7	33.3	20.0	16.7	2.90 (1.27)

Item IIC2 6c: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to students for team work?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	23.7	18.4	34.2	13.2	10.5	3.32 (1.27)
Arabic Language	7.0	19.1	23.5	24.3	26.1	2.57 (1.26)
English Language	3.4	23.1	29.9	30.8	12.8	2.74 (1.06)
Mathematics	5.8	13.5	17.3	32.7	30.8	2.31 (1.21)
Specialized Subject Matters in The Arts						
General Sciences	7.4	25.9	29.6	25.9	11.1	2.93 (1.14)
History	6.3	20.6	22.2	25.4	25.4	2.57 (1.25)
Geography	9.7	8.3	31.9	23.6	26.4	2.51 (1.25)
Civic Education	18.4	7.9	18.4	23.7	31.6	2.58 (1.48)
Specialized Subject Matters in The Sciences						
Chemistry	7.3	18.2	30.9	25.5	18.2	2.71 (1.18)
Physics	9.1	12.7	38.2	21.8	18.2	2.73 (1.18)
Biology	8.2	18.4	30.6	16.3	26.5	2.65 (1.28)
Human Culture	10.0	23.3	30.0	16.7	20.0	2.87 (1.28)

Item IIC2 6d: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to students for individual work, both during and outside of classroom time?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	10.4	27.3	29.9	10.4	22.1	2.94 (1.30)
Arabic Language	10.3	12.9	28.4	18.1	30.2	2.55 (1.32)
English Language	3.5	18.6	33.6	25.7	18.6	2.63 (1.10)
Mathematics	2.8	12.3	20.8	29.2	34.9	2.19 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	7.4	14.8	14.8	37.0	25.9	2.41 (1.25)
History	4.8	14.5	17.7	27.4	35.5	2.26 (1.23)
Geography	9.7	6.9	15.3	29.2	38.9	2.19 (1.30)
Civic Education	10.3	12.8	15.4	28.2	33.3	2.39 (1.35)
Specialized Subject Matters in The Sciences						
Chemistry	7.4	14.8	20.4	24.1	33.3	2.39 (1.30)
Physics	7.3	12.7	23.6	21.8	34.5	2.36 (1.28)
Biology	2.0	14.0	22.0	32.0	30.0	2.26 (1.10)
Human Culture	10.3	17.2	31.0	17.2	24.1	2.72 (1.31)

Item IIC2 7: To what extent are items of audio/visual equipment available for immediate use?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.3	17.7	29.1	24.1	8.9	3.17 (1.26)
Arabic Language	8.8	19.3	30.7	16.7	24.6	2.71 (1.27)
English Language	4.5	31.3	31.3	18.8	14.3	2.93 (1.12)
Mathematics	1.9	11.1	25.9	31.5	29.6	2.24 (1.06)
Specialized Subject Matters in The Arts						
General Sciences	10.7	32.1	21.4	17.9	17.9	3.00 (1.31)
History	8.1	17.7	24.2	22.6	27.4	2.57 (1.29)
Geography	9.5	8.1	31.1	23.0	28.4	2.47 (1.25)
Civic Education	15.8	13.2	23.7	26.3	21.1	2.76 (1.36)
Specialized Subject Matters in The Sciences						
Chemistry	10.9	21.8	32.7	18.2	16.4	2.93 (1.23)
Physics	14.3	30.4	28.6	17.9	8.9	3.23 (1.18)
Biology	6.0	30.0	34.0	22.0	8.0	3.04 (1.05)
Human Culture	10.0	26.7	16.7	20.0	26.7	2.73 (1.39)

Item IIC2 8: To what extent are the materials, equipment, and services in the school room kept in good working order?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	26.6	26.6	29.1	12.7	5.1	3.57 (1.16)
Arabic Language	18.8	32.1	27.7	13.4	8.0	3.40 (1.17)
English Language	9.5	49.1	31.0	6.0	4.3	3.53 (0.91)
Mathematics	6.5	25.0	32.4	22.2	13.9	2.88 (1.13)
Specialized Subject Matters in The Arts						
General Sciences	14.3	53.6	21.4	7.1	3.6	3.68 (0.95)
History	14.5	24.2	24.2	22.6	14.5	3.02 (1.29)
Geography	17.8	16.4	26.0	24.7	15.1	2.97 (1.32)
Civic Education	26.3	28.9	18.4	15.8	10.5	3.45 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	18.2	45.5	29.1	3.6	3.6	3.71 (0.94)
Physics	18.5	51.9	18.5	9.3	1.9	3.76 (0.93)
Biology	20.4	34.7	24.5	20.4	0.0	3.55 (1.04)
Human Culture	26.7	23.3	16.7	20.0	13.3	3.30 (1.42)

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Part II Section C: Part 2
Human and Physical Resources: Equipment, Facilities, and Materials
(Supervisor)

Item IIC2 1: To what extent are the classrooms adequate in number and size for the number of students in the class?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	41.7	50.0	1.58 (0.67)
Arabic Language	31.3	43.8	18.8	0.0	6.3	3.94 (1.06)
English Language	21.1	57.9	10.5	10.5	0.0	3.90 (0.88)
Mathematics	22.2	66.7	11.1	0.0	0.0	4.11 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
History	62.5	37.5	0.0	0.0	0.0	4.63 (0.52)
Geography	42.9	57.1	0.0	0.0	0.0	4.43 (0.54)
Civic Education	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIC2 2a: To what degree are adequate quantities of books for teachers provided?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	25.0	33.3	25.0	8.3	3.00 (1.13)
Arabic Language	12.5	25.0	37.5	12.5	12.5	3.13 (1.20)
English Language	68.4	26.3	0.0	5.3	0.0	4.58 (0.77)
Mathematics	0.0	22.2	33.3	11.1	33.3	2.44 (1.24)
Specialized Subject Matters in The Arts						
General Sciences	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
History	0.0	12.5	37.5	25.0	25.0	2.38 (1.06)
Geography	0.0	0.0	28.6	57.1	14.3	2.14 (0.69)
Civic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	40.0	60.0	0.0	2.40 (0.55)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	25.0	25.0	50.0	0.0	2.75 (0.96)
Human Culture	0.0	0.0	0.0	100.0	0.0	2.00 (0.00)

Item IIC2 2b: To what degree are adequate quantities of books for students provided?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	33.3	41.7	0.0	16.7	3.17 (1.19)
Arabic Language	20.0	13.3	33.3	20.0	13.3	3.07 (1.34)
English Language	57.9	36.8	5.3	0.0	0.0	4.53 (0.61)
Mathematics	0.0	33.3	22.2	11.1	33.3	2.56 (1.33)
Specialized Subject Matters in The Arts						
General Sciences	0.0	0.0	40.0	40.0	20.0	2.20 (0.84)
History	0.0	0.0	50.0	25.0	25.0	2.25 (0.89)
Geography	0.0	0.0	42.9	28.6	28.6	2.14 (0.90)
Civic Education	0.0	0.0	33.3	50.0	16.7	2.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	33.3	33.3	16.7	2.50 (1.05)
Physics	0.0	0.0	0.0	66.7	33.3	1.67 (0.58)
Biology	25.0	0.0	25.0	25.0	25.0	2.75 (1.71)
Human Culture	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)

Item IIC2 3a: Rate the rooms where you teach your course relative to the following characteristic: Proper Ventilation.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	25.0	58.3	1.58 (0.79)
Arabic Language	56.3	31.3	0.0	6.3	6.3	4.25 (1.18)
English Language	36.8	57.9	5.3	0.0	0.0	4.32 (0.58)
Mathematics	22.2	66.7	11.1	0.0	0.0	4.11 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
History	62.5	25.0	12.5	0.0	0.0	4.50 (0.76)
Geography	57.1	42.9	0.0	0.0	0.0	4.57 (0.54)
Civic Education	66.7	16.7	0.0	16.7	0.0	4.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	75.0	25.0	0.0	0.0	0.0	4.75 (0.50)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IIC2 3b: Rate the rooms where you teach your course relative to the following characteristic: Electrical outlets where needed.

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	25.0	16.7	58.3	1.67 (0.89)
Arabic Language	50.0	31.3	6.3	6.3	6.3	4.13 (1.20)
English Language	26.3	31.6	31.6	5.3	5.3	3.68 (1.11)
Mathematics	11.1	55.6	33.3	0.0	0.0	3.78 (0.67)
Specialized Subject Matters in The Arts						
General Sciences	80.0	20.0	0.0	0.0	0.0	4.80 (0.45)
History	62.5	25.0	12.5	0.0	0.0	4.50 (0.76)
Geography	57.1	42.9	0.0	0.0	0.0	4.57 (0.54)
Civic Education	66.7	16.7	0.0	16.7	0.0	4.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IIC2 3c: Rate the rooms where you teach your course relative to the following characteristic: Room darkening capability.

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	25.0	25.0	25.0	8.3	3.17 (1.27)
Arabic Language	25.0	50.0	18.8	6.3	0.0	3.94 (0.85)
English Language	10.5	0.0	15.8	26.3	47.4	2.00 (1.29)
Mathematics	0.0	66.7	22.2	0.0	11.1	3.44 (1.01)
Specialized Subject Matters in The Arts						
General Sciences	33.3	33.3	16.7	0.0	16.7	3.67 (1.51)
History	37.5	37.5	12.5	0.0	12.5	3.88 (1.36)
Geography	57.1	28.6	14.3	0.0	0.0	4.43 (0.79)
Civic Education	66.7	16.7	16.7	0.0	0.0	4.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)

Item IIC2 3d: Rate the rooms where you teach your course relative to the following characteristic: Adequate facilities for large and small group instruction and independent study.

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	25.0	25.0	33.3	8.3	2.92 (1.17)
Arabic Language	6.3	56.3	25.0	12.5	0.0	3.56 (0.81)
English Language	15.8	10.5	31.6	31.6	10.5	2.90 (1.24)
Mathematics	0.0	22.2	55.6	11.1	11.1	2.89 (0.93)
Specialized Subject Matters in The Arts						
General Sciences	16.7	66.7	0.0	0.0	16.7	3.67 (1.37)
History	0.0	25.0	50.0	12.5	12.5	2.88 (0.99)
Geography	14.3	14.3	57.1	0.0	14.3	3.14 (1.22)
Civic Education	0.0	16.7	33.3	33.3	16.7	2.50 (1.05)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Physics	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIC2 3e: Rate the rooms where you teach your course relative to the following characteristic: Adequate space for storing equipment and materials.

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	8.3	33.3	41.7	8.3	2.67 (1.07)
Arabic Language	18.8	43.8	25.0	12.5	0.0	3.69 (0.95)
English Language	10.5	10.5	26.3	47.4	5.3	2.74 (1.10)
Mathematics	0.0	44.4	33.3	22.2	0.0	3.22 (0.83)
Specialized Subject Matters in The Arts						
General Sciences	50.0	50.0	0.0	0.0	0.0	4.50 (0.55)
History	0.0	25.0	62.5	0.0	12.5	3.00 (0.93)
Geography	0.0	28.6	42.9	14.3	14.3	2.86 (1.07)
Civic Education	0.0	33.3	16.7	33.3	16.7	2.67 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

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Item IIC2 3f: Rate the rooms where you teach your course relative to the following characteristic: Adequate space for student project work.

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.7	8.3	50.0	16.7	8.3	3.08 (1.17)
Arabic Language	6.7	46.7	33.3	6.7	6.7	3.40 (0.99)
English Language	10.5	0.0	26.3	57.9	5.3	2.53 (1.02)
Mathematics	0.0	22.2	33.3	33.3	11.1	2.67 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	16.7	66.7	0.0	0.0	16.7	3.67 (1.37)
History	0.0	12.5	75.0	0.0	12.5	2.88 (0.84)
Geography	0.0	0.0	42.9	42.9	14.3	2.29 (0.76)
Civic Education	0.0	16.7	16.7	33.3	33.3	2.17 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	40.0	60.0	0.0	2.40 (0.55)
Physics	50.0	0.0	0.0	50.0	0.0	3.50 (2.12)
Biology	0.0	25.0	25.0	50.0	0.0	2.75 (0.96)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIC2 4: To what extent are teachers instructed in the use of equipment and materials?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	16.7	33.3	25.0	16.7	2.75 (1.22)
Arabic Language	6.7	40.0	46.7	0.0	6.7	3.40 (0.91)
English Language	31.6	21.1	31.6	5.3	10.5	3.58 (1.31)
Mathematics	11.1	22.2	44.4	11.1	11.1	3.11 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	16.7	66.7	0.0	16.7	0.0	3.83 (0.98)
History	0.0	12.5	62.5	12.5	12.5	2.75 (0.89)
Geography	0.0	0.0	57.1	28.6	14.3	2.43 (0.79)
Civic Education	0.0	0.0	66.7	16.7	16.7	2.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	16.7	33.3	0.0	3.17 (0.98)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIC2 5: To what extent are teachers responsible for the selection of equipment and materials?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	66.7	25.0	0.0	2.92 (0.79)
Arabic Language	0.0	53.3	26.7	13.3	6.7	3.27 (0.96)
English Language	5.3	5.3	21.1	21.1	47.4	2.00 (1.20)
Mathematics	11.1	22.2	44.4	11.1	11.1	3.11 (1.17)
Specialized Subject Matters in The Arts						
General Sciences	33.3	0.0	16.7	16.7	33.3	2.83 (1.84)
History	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
Geography	0.0	0.0	57.1	28.6	14.3	2.43 (0.79)
Civic Education	0.0	0.0	50.0	16.7	33.3	2.17 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	16.7	33.3	16.7	2.67 (1.21)
Physics	33.3	0.0	33.3	0.0	33.3	3.00 (2.00)
Biology	0.0	50.0	0.0	25.0	25.0	2.75 (1.50)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIC2 6a: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to teachers for instructional purposes?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	58.3	16.7	16.7	2.58 (0.90)
Arabic Language	6.7	53.3	33.3	6.7	0.0	3.60 (0.74)
English Language	21.1	26.3	31.6	15.8	5.3	3.42 (1.17)
Mathematics	0.0	22.2	44.4	22.2	11.1	2.78 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	0.0	50.0	25.0	12.5	12.5	3.13 (1.13)
Geography	0.0	14.3	71.4	14.3	0.0	3.00 (0.58)
Civic Education	0.0	16.7	16.7	66.7	0.0	2.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)
Biology	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

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Item IIC2 6b: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to students for project work?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	50.0	25.0	16.7	2.50 (0.91)
Arabic Language	13.3	53.3	13.3	20.0	0.0	3.60 (0.99)
English Language	5.6	0.0	27.8	50.0	16.7	2.28 (0.96)
Mathematics	0.0	22.2	44.4	22.2	11.1	2.78 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	16.7	0.0	33.3	3.17 (1.84)
History	0.0	25.0	37.5	25.0	12.5	2.75 (1.04)
Geography	0.0	0.0	57.1	28.6	14.3	2.43 (0.79)
Civic Education	0.0	0.0	33.3	50.0	16.7	2.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	50.0	50.0	0.0	2.50 (0.55)
Physics	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)
Biology	0.0	50.0	25.0	25.0	0.0	3.25 (0.96)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIC2 6c: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to students for team work?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	8.3	50.0	25.0	8.3	2.83 (1.03)
Arabic Language	6.7	60.0	20.0	13.3	0.0	3.60 (0.83)
English Language	5.3	5.3	31.6	42.1	15.8	2.42 (1.02)
Mathematics	0.0	22.2	44.4	22.2	11.1	2.78 (0.97)
Specialized Subject Matters in The Arts						
General Sciences	33.3	16.7	33.3	0.0	16.7	3.50 (1.52)
History	0.0	12.5	50.0	25.0	12.5	2.63 (0.92)
Geography	0.0	0.0	42.9	42.9	14.3	2.29 (0.76)
Civic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	50.0	50.0	0.0	2.50 (0.55)
Physics	33.3	0.0	0.0	33.3	33.3	2.67 (2.08)
Biology	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIC2 6d: To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to students for individual work, both during and outside of classroom time?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	8.3	25.0	25.0	16.7	3.00 (1.48)
Arabic Language	0.0	53.3	26.7	13.3	6.7	3.27 (0.96)
English Language	5.3	5.3	21.1	31.6	36.8	2.11 (1.15)
Mathematics	0.0	11.1	44.4	33.3	11.1	2.56 (0.88)
Specialized Subject Matters in The Arts						
General Sciences	0.0	33.3	33.3	0.0	33.3	2.67 (1.37)
History	0.0	37.5	12.5	25.0	25.0	2.63 (1.30)
Geography	0.0	0.0	28.6	57.1	14.3	2.14 (0.69)
Civic Education	0.0	0.0	16.7	50.0	33.3	1.83 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	16.7	50.0	33.3	1.83 (0.75)
Physics	0.0	0.0	33.3	0.0	66.7	1.67 (1.16)
Biology	0.0	25.0	0.0	50.0	25.0	2.25 (1.26)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIC2 7: To what extent are items of audio/visual equipment available for immediate use?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	25.0	33.3	25.0	8.3	3.00 (1.13)
Arabic Language	0.0	60.0	20.0	13.3	6.7	3.33 (0.98)
English Language	21.1	21.1	26.3	15.8	15.8	3.16 (1.39)
Mathematics	0.0	0.0	66.7	22.2	11.1	2.56 (0.73)
Specialized Subject Matters in The Arts						
General Sciences	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	0.0	25.0	50.0	12.5	12.5	2.88 (0.99)
Geography	0.0	0.0	42.9	57.1	0.0	2.43 (0.54)
Civic Education	0.0	0.0	50.0	50.0	0.0	2.50 (0.55)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	16.7	33.3	0.0	3.17 (0.98)
Physics	33.3	0.0	0.0	33.3	33.3	2.67 (2.08)
Biology	25.0	50.0	0.0	25.0	0.0	3.75 (1.26)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IIC2 8: To what extent are the materials, equipment, and services in the school room kept in good working order?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	33.3	33.3	16.7	2.50 (1.00)
Arabic Language	12.5	56.3	25.0	6.3	0.0	3.75 (0.78)
English Language	16.7	38.9	33.3	11.1	0.0	3.61 (0.92)
Mathematics	0.0	55.6	44.4	0.0	0.0	3.56 (0.53)
Specialized Subject Matters in The Arts						
General Sciences	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
History	0.0	50.0	37.5	12.5	0.0	3.38 (0.74)
Geography	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
Civic Education	0.0	16.7	66.7	0.0	16.7	2.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Part II Section C: Part 2
Human and Physical Resources: Equipment, Facilities, and Materials
(Administrator)

Item IIC2	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. To what extent are the classrooms adequate in number and size for the number of students in the class?	45.3	30.7	16.0	5.3	2.7	4.11 (1.03)
2. To what degree are adequate quantities of the following provided:						
a. books for teachers?	0.0	24.2	33.9	33.9	8.1	2.74 (0.92)
b. books for students?	2.7	27.4	30.1	27.4	12.3	2.81 (1.06)
3. Rate the classrooms where you supervise relative to the following characteristics:						
a. proper ventilation?	60.0	26.7	6.7	4.0	2.7	4.37 (0.97)
b. electrical outlets where needed?	48.6	32.4	14.9	4.1	0.0	4.26 (0.86)
c. room darkening capability?	10.8	24.3	29.7	20.3	14.9	2.96 (1.22)
d. adequate facilities for large and small group instruction and independent study?	16.0	30.7	28.0	14.7	10.7	3.27 (1.21)
e. adequate space for storing equipment and materials?	20.0	24.0	26.7	12.0	17.3	3.17 (1.36)
f. adequate space for student project work?	12.3	23.3	31.5	17.8	15.1	3.00 (1.24)
4. To what extent are teachers instructed in the use of equipment and materials?	8.0	25.3	42.7	18.7	5.3	3.12 (0.99)
5. To what extent are teachers responsible for the selection of equipment and materials?	9.3	25.3	33.3	25.3	6.7	3.05 (1.08)
6. To what degree are suitable types of basic audio/visual equipment and instructional aids provided for and readily available to:						
a. teachers for instructional purposes?	17.3	37.3	20.0	20.0	5.3	3.41 (1.15)
b. students for project work?	8.0	17.3	29.3	30.7	14.7	2.73 (1.16)
c. students for team work?	12.0	16.0	26.7	30.7	14.7	2.80 (1.23)
d. students for individual work, both during and outside of classroom time?	4.0	10.7	32.0	29.3	24.0	2.41 (1.09)
7. To what extent are items of audio-visual equipment available for immediate use?	14.9	31.1	28.4	18.9	6.8	3.28 (1.14)
8. To what extent are the materials, equipment and services in the school room kept in good working order?	29.3	41.3	17.3	10.7	1.3	3.87 (1.00)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

1208

Part II Section D
Textbooks
(Teacher)

Item IID 1a: To what degree does the student's textbook reflect instructional objectives of the curriculum?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	27.5	40.0	12.5	17.5	2.5	3.73 (1.13)
Arabic Language	19.0	37.1	25.0	15.5	3.4	3.53 (1.08)
English Language	7.1	40.7	44.2	7.1	0.9	3.46 (0.77)
Mathematics	15.3	37.8	33.3	9.0	4.5	3.51 (1.01)
Specialized Subject Matters in The Arts						
General Science	25.0	46.4	21.4	7.1	0.0	3.89 (0.88)
History	32.8	45.9	16.4	4.9	0.0	4.07 (0.83)
Geography	30.1	45.2	19.2	4.1	1.4	3.99 (0.89)
Civic Education	47.4	34.2	15.8	0.0	2.6	4.24 (0.91)
Specialized Subject Matters in The Sciences						
Chemistry	14.5	49.1	25.5	7.3	3.6	3.64 (0.95)
Physics	12.5	51.8	28.6	5.4	1.8	3.68 (0.83)
Biology	24.5	42.9	22.4	6.1	4.1	3.78 (1.03)
Human Culture	21.9	34.4	25.0	18.8	0.0	3.59 (1.04)

Item IID 1b: To what degree does the student's texbook conform to the developmental stages of the students in terms of vocabulary readability and facilitating understanding?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.3	44.3	15.2	10.1	5.1	3.75 (1.10)
Arabic Language	18.1	31.0	34.5	9.5	6.9	3.44 (1.11)
English Language	4.4	50.4	37.2	6.2	1.8	3.50 (0.76)
Mathematics	11.7	27.9	38.7	14.4	7.2	3.23 (1.07)
Specialized Subject Matters in The Arts						
General Science	28.6	28.6	35.7	7.1	0.0	3.79 (0.96)
History	30.6	35.5	25.8	6.5	1.6	3.87 (0.98)
Geography	24.7	42.5	20.5	8.2	4.1	3.75 (1.05)
Civic Education	26.3	50.0	10.5	7.9	5.3	3.84 (1.08)
Specialized Subject Matters in The Sciences						
Chemistry	9.1	43.6	43.6	3.6	0.0	3.58 (0.71)
Physics	7.1	50.0	32.1	10.7	0.0	3.54 (0.79)
Biology	16.3	38.8	28.6	10.2	6.1	3.49 (1.08)
Human Culture	21.9	40.6	28.1	6.3	3.1	3.72 (0.99)

Item IID 1c: To what degree does the student's textbook satisfy needs and develop interests and motivations of students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.9	44.9	20.5	14.1	2.6	3.62 (1.02)
Arabic Language	16.4	29.3	34.5	13.8	6.0	3.36 (1.10)
English Language	2.0	30.6	54.1	11.2	2.0	3.19 (0.74)
Mathematics	7.2	22.5	45.0	17.1	8.1	3.04 (1.01)
Specialized Subject Matters in The Arts						
General Science	14.3	32.1	35.7	17.9	0.0	3.43 (0.96)
History	24.2	37.1	25.8	11.3	1.6	3.71 (1.01)
Geography	20.5	27.4	39.7	9.6	2.7	3.53 (1.02)
Civic Education	32.4	32.4	24.3	2.7	8.1	3.78 (1.18)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	24.5	52.8	15.1	0.0	3.25 (0.81)
Physics	3.6	28.6	50.0	14.3	3.6	3.14 (0.84)
Biology	16.7	29.2	29.2	18.8	6.3	3.31 (1.15)
Human Culture	19.8	28.1	34.4	18.8	0.0	3.47 (1.02)

Item IID 1d: To what degree does the student's textbook present characters or situations with which the student can identify?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.9	41.0	25.6	10.3	5.1	3.56 (1.06)
Arabic Language	17.2	35.3	33.6	10.3	3.4	3.53 (1.01)
English Language	2.0	28.6	56.1	13.3	0.0	3.19 (0.68)
Mathematics	6.6	20.8	34.9	21.7	16.0	2.80 (1.14)
Specialized Subject Matters in The Arts						
General Science	18.5	37.0	25.9	14.8	3.7	3.52 (1.09)
History	25.8	45.2	22.6	4.8	1.6	3.89 (0.91)
Geography	22.5	40.8	25.4	7.0	4.2	3.70 (1.03)
Civic Education	36.1	33.3	11.1	19.4	0.0	3.86 (1.13)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	34.0	39.6	15.1	3.8	3.26 (0.94)
Physics	8.9	25.0	37.5	26.8	1.8	3.13 (0.97)
Biology	12.2	32.7	40.8	12.2	2.0	3.41 (0.93)
Human Culture	28.1	15.6	34.4	15.6	6.3	3.44 (1.24)

Item IID 1e: To what degree does the student's textbook help to develop critical thinking?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	12.2	29.7	37.8	14.9	5.4	3.28 (1.04)
Arabic Language	16.5	29.6	36.5	12.2	5.2	3.40 (1.07)
English Language	4.2	13.7	43.2	32.6	6.3	2.77 (0.92)
Mathematics	10.0	26.4	32.7	20.9	10.0	3.06 (1.13)
Specialized Subject Matters in The Arts						
General Science	18.5	18.5	33.3	25.9	3.7	3.22 (1.16)
History	21.0	35.5	29.0	12.9	1.6	3.61 (1.01)
Geography	23.3	30.1	34.2	9.6	2.7	3.62 (1.04)
Civic Education	26.3	34.2	31.6	7.9	0.0	3.79 (0.94)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	37.7	45.3	7.5	1.9	3.42 (0.82)
Physics	10.9	29.1	40.0	12.7	7.3	3.24 (1.05)
Biology	14.3	32.7	32.7	18.4	2.0	3.39 (1.02)
Human Culture	28.1	31.3	28.1	6.3	6.3	3.69 (1.15)

Item IID 1f: To what degree does the student's textbook conform to the achievement level of the students?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	18.4	35.5	23.7	17.1	5.3	3.45 (1.14)
Arabic Language	13.9	30.4	31.3	14.8	9.6	3.24 (1.16)
English Language	3.1	23.5	58.2	14.3	1.0	3.13 (0.73)
Mathematics	6.3	33.3	36.0	13.5	10.8	3.11 (1.07)
Specialized Subject Matters in The Arts						
General Science	17.9	21.4	50.0	7.1	3.6	3.43 (1.00)
History	24.2	32.3	29.0	12.9	1.6	3.65 (1.04)
Geography	9.5	32.4	40.5	12.2	5.4	3.28 (0.99)
Civic Education	21.1	44.7	18.4	7.9	7.9	3.63 (1.15)
Specialized Subject Matters in The Sciences						
Chemistry	9.6	48.1	34.6	7.7	0.0	3.60 (0.77)
Physics	5.4	26.8	44.6	14.3	8.9	3.05 (1.00)
Biology	12.5	37.5	35.4	14.6	0.0	3.48 (0.90)
Human Culture	25.0	34.4	21.9	15.6	3.1	3.63 (1.13)

Item IID 2a: To what degree is the textbook satisfactory in terms of logical sequencing of subject matter and learing tasks?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	23.6	37.5	19.4	13.9	5.6	3.60 (1.16)
Arabic Language	14.9	31.6	36.8	10.5	6.1	3.39 (1.06)
English Language	3.1	40.8	49.0	7.1	0.0	3.40 (0.67)
Mathematics	7.8	27.2	35.9	24.3	4.9	3.09 (1.01)
Specialized Subject Matters in The Arts						
General Science	15.4	26.9	46.2	11.5	0.0	3.46 (0.91)
History	11.3	54.8	21.0	8.1	4.8	3.60 (0.97)
Geography	19.2	41.1	27.4	9.6	2.7	3.64 (0.99)
Civic Education	27.0	43.2	16.2	8.1	5.4	3.78 (1.11)
Specialized Subject Matters in The Sciences						
Chemistry	8.0	38.0	46.0	8.0	0.0	3.46 (0.76)
Physics	7.1	41.1	39.3	8.9	3.6	3.39 (0.89)
Biology	8.7	39.1	37.0	13.0	2.2	3.39 (0.91)
Human Culture	22.6	38.7	22.6	16.1	0.0	3.68 (1.01)

Item IID 2b: To what degree is the textbook satisfactory in terms of accuracy of information?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	28.6	26.0	19.5	18.2	7.8	3.49 (1.29)
Arabic Language	19.1	36.5	32.2	7.8	4.3	3.58 (1.03)
English Language	22.2	55.6	21.2	1.0	0.0	3.99 (0.69)
Mathematics	13.9	35.2	34.3	10.2	6.5	3.40 (1.06)
Specialized Subject Matters in The Arts						
General Science	25.0	28.6	28.6	17.9	0.0	3.61 (1.07)
History	16.1	50.0	22.6	9.7	1.6	3.69 (0.92)
Geography	27.4	38.4	23.3	6.8	4.1	3.78 (1.06)
Civic Education	36.8	42.1	13.2	5.3	2.6	4.05 (0.99)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	49.1	32.1	9.4	0.0	3.59 (0.80)
Physics	9.1	45.5	29.1	14.5	1.8	3.46 (0.92)
Biology	20.8	45.8	22.9	6.3	4.2	3.73 (1.01)
Human Culture	18.8	31.3	37.5	12.5	0.0	3.56 (0.95)

Item IID 2c: To what degree is the textbook satisfactory in terms of recency of information?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	23.7	27.6	26.3	19.7	2.6	3.50 (1.14)
Arabic Language	14.8	40.0	28.7	11.3	5.2	3.48 (1.05)
English Language	10.0	54.0	33.0	3.0	0.0	3.71 (0.69)
Mathematics	16.2	45.0	27.9	7.2	3.6	3.63 (0.96)
Specialized Subject Matters in The Arts						
General Science	17.9	39.3	25.0	10.7	7.1	3.50 (1.14)
History	16.1	45.2	25.8	9.7	3.2	3.61 (0.98)
Geography	28.8	35.6	23.3	5.5	6.8	3.74 (1.14)
Civic Education	32.4	29.7	24.3	10.8	2.7	3.78 (1.11)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	50.9	28.3	9.4	3.8	3.49 (0.91)
Physics	14.3	42.9	28.6	12.5	1.8	3.55 (0.95)
Biology	23.9	39.1	26.1	6.5	4.3	3.72 (1.05)
Human Culture	16.1	32.3	29.0	19.4	3.2	3.39 (1.09)

Item IID 2d: To what degree is the textbook satisfactory in terms of integration of concepts and topics?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	24.7	32.5	18.2	20.8	3.9	3.53 (1.19)
Arabic Language	15.7	33.0	40.0	7.0	4.3	3.49 (0.99)
English Language	7.0	43.0	40.0	10.0	0.0	3.47 (0.77)
Mathematics	7.4	38.0	37.0	13.0	4.6	3.31 (0.95)
Specialized Subject Matters in The Arts						
General Science	18.5	29.6	44.4	7.4	0.0	3.59 (0.89)
History	24.6	42.6	21.3	9.8	1.6	3.79 (0.99)
Geography	29.7	44.6	17.6	8.1	0.0	3.96 (0.90)
Civic Education	39.5	39.5	10.5	10.5	0.0	4.08 (0.97)
Specialized Subject Matters in The Sciences						
Chemistry	7.7	44.2	40.4	5.8	1.9	3.50 (0.80)
Physics	7.1	44.6	30.4	14.3	3.6	3.38 (0.95)
Biology	19.1	44.7	23.4	10.6	2.1	3.68 (0.98)
Human Culture	15.6	34.4	37.5	12.5	0.0	3.53 (0.92)

Item IID 2e: To what degree is the textbook satisfactory in terms of flexibility and variations between concepts topics and textbook content?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.5	32.5	33.7	11.2	5.0	3.46 (1.07)
Arabic Language	15.5	32.8	37.1	11.2	3.4	3.46 (1.00)
English Language	5.1	30.6	58.2	6.1	0.0	3.35 (0.68)
Mathematics	8.0	33.0	38.4	15.2	5.4	3.23 (0.99)
Specialized Subject Matters in The Arts						
General Science	14.3	32.1	42.9	10.7	0.0	3.50 (0.88)
History	21.0	38.7	29.0	6.5	4.8	3.65 (1.04)
Geography	19.2	41.1	27.4	8.2	4.1	3.63 (1.02)
Civic Education	34.2	36.8	13.2	10.5	5.3	3.84 (1.18)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	35.8	41.5	13.2	0.0	3.42 (0.84)
Physics	7.1	39.3	46.4	5.4	1.8	3.45 (0.78)
Biology	16.7	47.9	22.9	12.5	0.0	3.69 (0.90)
Human Culture	15.6	18.8	53.1	12.5	0.0	3.38 (0.91)

Item IID 2f: To what degree is the textbook satisfactory in terms of integration between its content and other subject matters without unnecessary repetition?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	12.7	35.4	30.4	13.9	7.6	3.32 (1.10)
Arabic Language	9.6	32.2	34.8	19.1	4.3	3.24 (1.01)
English Language	5.0	37.0	49.0	8.0	1.0	3.37 (0.75)
Mathematics	8.2	32.7	38.2	14.5	6.4	3.22 (1.01)
Specialized Subject Matters in The Arts						
General Science	14.3	14.3	50.0	21.4	0.0	3.21 (0.96)
History	14.5	46.8	19.4	17.7	1.6	3.55 (1.00)
Geography	16.7	37.5	33.3	8.3	4.2	3.54 (1.01)
Civic Education	23.7	50.0	10.5	10.5	5.3	3.76 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	24.5	37.7	26.4	1.9	3.13 (0.98)
Physics	12.5	25.0	48.2	12.5	1.8	3.34 (0.92)
Biology	8.5	46.8	21.3	17.0	6.4	3.34 (1.07)
Human Culture	9.4	37.5	37.5	12.5	3.1	3.38 (0.94)

Item IID 2g: To what degree is the textbook satisfactory in terms of its content and amount of instructional time allowed?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.5	39.7	19.2	17.9	2.6	3.58 (1.09)
Arabic Language	14.2	26.5	31.0	18.6	9.7	3.17 (1.18)
English Language	3.1	35.4	43.8	15.6	2.1	3.22 (0.82)
Mathematics	13.8	33.9	36.7	10.1	5.5	3.40 (1.03)
Specialized Subject Matters in The Arts						
General Science	25.0	21.4	42.9	10.7	0.0	3.61 (0.99)
History	19.7	47.5	13.1	16.4	3.3	3.64 (1.08)
Geography	19.2	19.2	31.5	20.5	9.6	3.18 (1.24)
Civic Education	34.2	31.6	18.4	10.5	5.3	3.79 (1.19)
Specialized Subject Matters in The Sciences						
Chemistry	7.8	27.5	29.4	21.6	13.7	2.94 (1.17)
Physics	9.1	32.7	40.0	9.1	9.1	3.24 (1.05)
Biology	16.7	45.8	22.9	14.6	0.0	3.65 (0.93)
Human Culture	12.5	31.3	28.1	12.5	15.6	3.13 (1.26)

Item IID 3a: If the textbook your teachers use has exercises that are used as student homework or classwork, to what extent are there some exercises that help in diagnosing the weaknesses of the students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	35.0	25.0	26.2	8.7	5.0	3.76 (1.17)
Arabic Language	20.4	34.5	23.0	16.8	5.3	3.48 (1.15)
English Language	2.0	25.3	51.5	15.2	6.1	3.02 (0.86)
Mathematics	8.3	34.9	36.7	13.8	6.4	3.25 (1.01)
Specialized Subject Matters in The Arts						
General Science	25.0	25.0	32.1	17.9	0.0	3.57 (1.07)
History	33.3	45.0	18.3	1.7	1.7	4.07 (0.86)
Geography	24.3	48.6	20.3	5.4	1.4	3.89 (0.89)
Civic Education	39.5	26.3	18.4	13.2	2.6	3.87 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	17.0	39.6	32.1	9.4	1.9	3.60 (0.95)
Physics	17.9	41.1	28.6	8.9	3.6	3.61 (1.00)
Biology	12.5	56.3	22.9	6.3	2.1	3.71 (0.85)
Human Culture	28.1	28.1	21.9	21.9	0.0	3.63 (1.13)

Item IID 3b: If the textbook your teachers use has exercises that are used as student homework or classwork, to what degree are the activities suggested in the textbook practicable?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	10.3	35.9	29.5	19.2	5.1	3.27 (1.05)
Arabic Language	11.2	25.9	29.3	19.0	14.7	3.00 (1.22)
English Language	2.0	39.0	49.0	7.0	3.0	3.30 (0.76)
Mathematics	10.5	32.4	37.1	16.2	3.8	3.30 (0.99)
Specialized Subject Matters in The Arts						
General Science	7.1	21.4	42.9	21.4	7.1	3.00 (1.02)
History	16.7	40.0	23.3	20.0	0.0	3.53 (1.00)
Geography	13.7	30.1	28.8	17.8	9.6	3.21 (1.18)
Civic Education	31.6	36.8	13.2	18.4	0.0	3.82 (1.09)
Specialized Subject Matters in The Sciences						
Chemistry	3.8	30.2	50.9	11.3	3.8	3.19 (0.83)
Physics	5.4	28.6	42.9	16.1	7.1	3.09 (0.98)
Biology	4.2	37.5	41.7	12.5	4.2	3.25 (0.89)
Human Culture	25.0	25.0	21.9	21.9	6.3	3.41 (1.27)

Item IID 3c: If the textbook your teachers use has exercises that are used as student homework or classwork, to what extent are the activities suitable to the students of this age group?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	19.0	30.4	29.1	16.5	5.1	3.42 (1.13)
Arabic Language	7.9	35.1	33.3	14.9	8.8	3.18 (1.07)
English Language	1.0	35.7	54.1	8.2	1.0	3.28 (0.67)
Mathematics	6.6	41.5	34.9	15.1	1.9	3.36 (0.89)
Specialized Subject Matters in The Arts						
General Science	14.8	29.6	44.4	11.1	0.0	3.48 (0.89)
History	21.0	37.1	33.9	8.1	0.0	3.71 (0.89)
Geography	12.5	26.4	45.8	15.3	0.0	3.36 (0.89)
Civic Education	22.2	47.2	19.4	5.6	5.6	3.75 (1.05)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	39.6	47.2	1.9	0.0	3.60 (0.72)
Physics	8.9	39.3	41.1	10.7	0.0	3.46 (0.81)
Biology	10.6	46.8	29.8	10.6	2.1	3.53 (0.91)
Human Culture	28.1	37.5	18.8	9.4	6.3	3.72 (1.17)

Item IID 3d: If the textbook your teachers use has exercises that are used as student homework or classwork, to what extent does the student feel motivated in solving the exercise?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.5	36.7	29.1	15.2	2.5	3.49 (1.02)
Arabic Language	13.3	31.0	35.4	10.6	9.7	3.27 (1.13)
English Language	3.0	25.3	58.6	12.1	1.0	3.17 (0.72)
Mathematics	2.9	32.0	43.7	16.5	4.9	3.12 (0.89)
Specialized Subject Matters in The Arts						
General Science	7.1	35.7	42.9	14.3	0.0	3.36 (0.83)
History	17.7	35.5	33.9	11.3	1.6	3.57 (0.97)
Geography	13.7	41.1	27.4	12.3	5.5	3.45 (1.06)
Civic Education	21.1	44.7	13.2	13.2	7.9	3.58 (1.20)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	39.6	39.6	9.4	0.0	3.53 (0.82)
Physics	3.6	32.7	45.5	9.1	9.1	3.13 (0.96)
Biology	4.2	47.9	31.3	14.6	2.1	3.38 (0.87)
Human Culture	15.6	34.4	28.1	15.6	6.3	3.38 (1.13)

Item IID 3e: If the textbook your teachers use has exercises that are used as student homework or classwork, to what degree are the questions suitable to the mental maturity level of the secondary age group?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	21.5	30.4	30.4	12.7	5.1	3.51 (1.12)
Arabic Language	15.5	37.9	28.4	10.3	7.8	3.43 (1.11)
English Language	2.0	32.3	56.6	7.1	2.0	3.25 (0.71)
Mathematics	7.6	29.5	49.5	10.5	2.9	3.29 (0.86)
Specialized Subject Matters in The Arts						
General Science	21.4	21.4	50.0	7.1	0.0	3.57 (0.92)
History	19.4	40.3	32.3	8.1	0.0	3.71 (0.88)
Geography	15.1	30.1	42.5	8.2	4.1	3.44 (0.99)
Civic Education	19.4	55.6	22.2	2.8	0.0	3.92 (0.73)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	41.5	39.6	7.5	0.0	3.57 (0.80)
Physics	5.4	41.1	33.9	17.9	1.8	3.30 (0.89)
Biology	14.6	45.8	25.0	12.5	2.1	3.58 (0.96)
Human Culture	15.6	34.4	37.5	12.5	0.0	3.53 (0.92)

Item IID 4a: To what degree is the textbook satisfactory in terms of design and layout (titles, table of contents, tables, examples, etc.)?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	34.2	30.1	13.7	9.6	12.3	3.64 (1.37)
Arabic Language	30.4	35.7	23.2	6.3	4.5	3.81 (1.08)
English Language	12.1	54.5	32.3	1.0	0.0	3.78 (0.66)
Mathematics	25.5	39.6	24.5	7.5	2.8	3.77 (1.01)
Specialized Subject Matters in The Arts						
General Science	28.6	39.3	25.0	7.1	0.0	3.89 (0.92)
History	39.3	36.1	18.0	1.6	4.9	4.03 (1.05)
Geography	40.3	34.7	23.6	1.4	0.0	4.14 (0.83)
Civic Education	50.0	39.5	7.9	2.6	0.0	4.37 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	28.8	51.9	13.5	3.8	1.9	4.02 (0.87)
Physics	32.7	43.6	16.4	5.5	1.8	4.00 (0.94)
Biology	23.4	29.8	34.0	8.5	4.3	3.60 (1.08)
Human Culture	38.7	25.8	25.8	9.7	0.0	3.94 (1.03)

Item IID 4b: To what degree is the textbook satisfactory in terms of binding?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	40.0	25.0	7.5	12.5	15.0	3.63 (1.49)
Arabic Language	41.4	31.0	17.2	4.3	6.0	3.97 (1.15)
English Language	20.2	41.4	25.3	10.1	3.0	3.66 (1.01)
Mathematics	47.2	33.0	14.2	4.7	0.9	4.21 (0.92)
Specialized Subject Matters in The Arts						
General Science	42.9	35.7	10.7	10.7	0.0	4.11 (0.99)
History	38.7	37.1	12.9	4.8	6.5	3.97 (1.15)
Geography	39.2	39.2	13.5	2.7	5.4	4.04 (1.07)
Civic Education	59.5	29.7	8.1	2.7	0.0	4.46 (0.77)
Specialized Subject Matters in The Sciences						
Chemistry	41.5	34.0	20.8	3.8	0.0	4.13 (0.88)
Physics	41.1	41.1	10.7	5.4	1.8	4.14 (0.94)
Biology	29.8	40.4	17.0	8.5	4.3	3.83 (1.09)
Human Culture	45.2	22.6	19.4	9.7	3.2	3.97 (1.17)

Item IID 4c: To what degree is the textbook satisfactory in terms of type size?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	46.2	23.7	8.7	8.7	12.5	3.83 (1.42)
Arabic Language	37.7	31.6	17.5	7.0	6.1	3.88 (1.18)
English Language	25.7	45.5	23.8	4.0	1.0	3.91 (0.86)
Mathematics	50.5	30.8	15.9	1.9	0.9	4.28 (0.87)
Specialized Subject Matters in The Arts						
General Science	39.3	50.0	3.6	7.1	0.0	4.21 (0.83)
History	41.9	38.7	11.3	1.6	6.5	4.08 (1.09)
Geography	42.5	41.1	12.3	1.4	2.7	4.19 (0.91)
Civic Education	60.5	31.6	5.3	2.6	0.0	4.50 (0.73)
Specialized Subject Matters in The Sciences						
Chemistry	44.2	44.2	11.5	0.0	0.0	4.33 (0.68)
Physics	42.9	44.6	8.9	0.0	3.6	4.23 (0.89)
Biology	35.4	39.6	16.7	6.3	2.1	4.00 (0.99)
Human Culture	51.6	22.6	16.1	6.5	3.2	4.13 (1.12)

Item IID 4d: To what degree is the textbook satisfactory in terms of size of the book and the number of pages?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	46.2	26.2	7.5	8.7	11.2	3.88 (1.38)
Arabic Language	28.9	24.6	23.7	13.2	9.6	3.50 (1.30)
English Language	17.8	52.5	24.8	4.0	1.0	3.82 (0.81)
Mathematics	42.1	35.5	16.8	4.7	0.9	4.13 (0.92)
Specialized Subject Matters in The Arts						
General Science	39.3	39.3	17.9	3.6	0.0	4.14 (0.85)
History	32.3	40.3	12.9	9.7	4.8	3.86 (1.13)
Geography	22.5	22.5	29.6	12.7	12.7	3.30 (1.30)
Civic Education	39.5	36.8	10.5	10.5	2.6	4.00 (1.09)
Specialized Subject Matters in The Sciences						
Chemistry	34.0	41.5	20.8	3.8	0.0	4.06 (0.84)
Physics	30.4	39.3	12.5	10.7	7.1	3.75 (1.21)
Biology	34.7	34.7	18.4	6.1	6.1	3.86 (1.16)
Human Culture	31.3	28.1	15.6	21.9	3.1	3.63 (1.24)

Item IID 4e: To what degree is the textbook satisfactory in terms of number, suitability, and usefulness of illustrations to assist in learning?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	21.5	29.1	24.1	16.5	8.9	3.38 (1.24)
Arabic Language	17.9	30.4	33.0	12.5	6.3	3.41 (1.11)
English Language	16.8	53.5	27.7	2.0	0.0	3.85 (0.71)
Mathematics	18.9	34.9	35.8	5.7	4.7	3.58 (1.01)
Specialized Subject Matters in The Arts						
General Science	32.1	32.1	21.4	7.1	7.1	3.75 (1.21)
History	21.7	38.3	28.3	3.3	8.3	3.62 (1.12)
Geography	24.7	26.0	23.3	15.1	11.0	3.38 (1.31)
Civic Education	34.2	34.2	21.1	5.3	5.3	3.87 (1.12)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	35.8	47.2	1.9	1.9	3.57 (0.82)
Physics	7.1	46.4	33.9	7.1	5.4	3.43 (0.93)
Biology	12.2	38.8	32.7	10.2	6.1	3.41 (1.04)
Human Culture	22.6	22.6	29.0	22.6	3.2	3.39 (1.17)

Item IID 4f: To what degree is the textbook satisfactory in terms of illustrations using realistic proportions and comparisons in relation to nature and in relation to other objects?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.5	36.2	27.5	12.5	6.3	3.46 (1.11)
Arabic Language	24.3	26.1	35.1	10.8	3.6	3.57 (1.08)
English Language	12.1	41.4	44.4	2.0	0.0	3.64 (0.72)
Mathematics	21.5	42.1	28.0	5.6	2.8	3.74 (0.96)
Specialized Subject Matters in The Arts						
General Science	21.4	46.4	21.4	3.6	7.1	3.71 (1.08)
History	21.0	43.5	21.0	6.5	8.1	3.63 (1.13)
Geography	20.5	31.5	28.8	9.6	9.6	3.44 (1.20)
Civic Education	29.7	40.5	10.8	16.2	2.7	3.78 (1.13)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	50.9	30.2	7.5	0.0	3.66 (0.78)
Physics	14.3	39.3	35.7	5.4	5.4	3.52 (0.99)
Biology	22.4	36.7	28.6	8.2	4.1	3.65 (1.05)
Human Culture	18.8	28.1	37.5	12.5	3.1	3.47 (1.05)

Item IID 4g: To what degree is the textbook satisfactory in terms of artistic quality and attractiveness of illustration?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	18.8	20.0	32.5	17.5	11.2	3.18 (1.25)
Arabic Language	25.9	28.7	27.8	10.2	7.4	3.56 (1.19)
English Language	23.7	42.3	29.9	4.1	0.0	3.86 (0.83)
Mathematics	19.6	38.3	27.1	9.3	5.6	3.57 (1.08)
Specialized Subject Matters in The Arts						
General Science	17.9	28.6	25.0	17.9	10.7	3.25 (1.27)
History	19.7	27.9	29.5	16.4	6.6	3.38 (1.17)
Geography	21.9	31.5	24.7	8.2	13.7	3.40 (1.30)
Civic Education	24.3	40.5	16.2	8.1	10.8	3.60 (1.26)
Specialized Subject Matters in The Sciences						
Chemistry	17.0	32.1	34.0	15.1	1.9	3.47 (1.01)
Physics	12.5	33.9	37.5	5.4	10.7	3.32 (1.11)
Biology	10.2	32.7	32.7	14.3	10.2	3.18 (1.13)
Human Culture	15.6	25.0	31.3	15.6	12.5	3.16 (1.25)

Part II Section D
Textbooks
(Supervisor)

Item IID 1a: To what degree does the student's textbook reflect instructional objectives of the curriculum?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	9.1	54.5	36.4	1.73 (0.65)
Arabic Language	25.0	56.3	12.5	6.3	0.0	4.00 (0.82)
English Language	5.3	57.9	26.3	10.5	0.0	3.58 (0.77)
Mathematics	0.0	66.7	33.3	0.0	0.0	3.67 (0.50)
Specialized Subject Matters in The Arts						
General Science	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
History	37.5	12.5	50.0	0.0	0.0	3.88 (0.99)
Geography	28.6	42.9	28.6	0.0	0.0	4.00 (0.82)
Civic Education	33.3	16.7	50.0	0.0	0.0	3.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IID 1b: To what degree does the student's texbook conform to the developmental stages of the students in terms of vocabulary readability and facilitating understanding?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	18.2	54.5	27.3	1.91 (0.70)
Arabic Language	18.8	3.8	31.3	0.0	6.3	3.69 (1.01)
English Language	10.5	42.1	36.8	10.5	0.0	3.53 (0.84)
Mathematics	0.0	55.6	33.3	11.1	0.0	3.44 (0.73)
Specialized Subject Matters in The Arts						
General Science	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
History	0.0	37.5	37.5	25.0	0.0	3.13 (0.84)
Geography	0.0	57.1	42.9	0.0	0.0	3.57 (0.54)
Civic Education	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
Physics	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)

Item IID 1c: To what degree does the student's textbook satisfy needs and develop interests and motivations of students?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	9.1	54.5	36.4	1.73 (0.65)
Arabic Language	6.3	37.5	50.0	6.3	0.0	3.44 (0.73)
English Language	11.1	27.8	44.4	16.7	0.0	3.33 (0.91)
Mathematics	0.0	22.2	44.4	33.3	0.0	2.89 (0.78)
Specialized Subject Matters in The Arts						
General Science	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	12.5	37.5	25.0	25.0	0.0	3.38 (1.06)
Geography	0.0	28.6	42.9	14.3	14.3	2.86 (1.07)
Civic Education	0.0	16.7	50.0	16.7	16.7	2.67 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IID 1d: To what degree does the student's textbook present characters or situations with which the student can identify?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	18.2	63.6	18.2	2.00 (0.63)
Arabic Language	31.3	18.8	43.8	0.0	6.3	3.69 (1.14)
English Language	5.6	44.4	38.9	11.1	0.0	3.44 (0.78)
Mathematics	0.0	33.3	33.3	33.3	0.0	3.00 (0.87)
Specialized Subject Matters in The Arts						
General Science	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	12.5	50.0	12.5	25.0	0.0	3.50 (1.07)
Geography	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	83.3	16.7	0.0	2.83 (0.41)
Physics	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IID 1e: To what degree does the student's textbook help to develop critical thinking?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	41.7	25.0	33.3	2.08 (0.90)
Arabic Language	6.3	50.0	37.5	0.0	6.3	3.50 (0.89)
English Language	0.0	5.9	47.1	35.3	11.8	2.47 (0.80)
Mathematics	0.0	22.2	44.4	33.3	0.0	2.89 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
History	25.0	25.0	37.5	12.5	0.0	3.63 (1.06)
Geography	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
Civic Education	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)

Item IID 1f: To what degree does the student's textbook conform to the achievement level of the students?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.74)
Arabic Language	0.0	60.0	33.3	6.7	0.0	3.53 (0.64)
English Language	0.0	27.8	50.0	16.7	5.6	3.00 (0.84)
Mathematics	0.0	44.4	22.2	22.2	11.1	3.00 (1.12)
Specialized Subject Matters in The Arts						
General Science	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
History	0.0	50.0	25.0	25.0	0.0	3.25 (0.89)
Geography	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
Civic Education	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Physics	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)

Item IID 2a: To what degree is the textbook satisfactory in terms of logical sequencing of subject matter and learing tasks?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	58.3	25.0	1.92 (0.67)
Arabic Language	25.0	37.5	37.5	0.0	0.0	3.88 (0.81)
English Language	0.0	55.6	27.8	16.7	0.0	3.39 (0.78)
Mathematics	0.0	55.6	11.1	22.2	11.1	3.11 (1.17)
Specialized Subject Matters in The Arts						
General Science	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	50.0	12.5	25.0	12.5	0.0	4.00 (1.20)
Geography	14.3	28.6	57.1	0.0	0.0	3.57 (0.79)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)

Item IID 2b: To what degree is the textbook satisfactory in terms of accuracy of information?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	41.7	41.7	1.75 (0.75)
Arabic Language	12.5	56.3	25.0	6.3	0.0	3.75 (0.78)
English Language	27.8	55.6	16.7	0.0	0.0	4.11 (0.68)
Mathematics	11.1	66.7	11.1	0.0	11.1	3.67 (1.12)
Specialized Subject Matters in The Arts						
General Science	0.0	83.3	16.7	0.0	0.0	3.83 (0.41)
History	25.0	62.5	0.0	12.5	0.0	4.00 (0.93)
Geography	14.3	71.4	0.0	14.3	0.0	3.86 (0.90)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Physics	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	66.7	0.0	0.0	33.3	0.0	4.00 (1.73)

Item IID 2c: To what degree is the textbook satisfactory in terms of recency of information?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	16.7	33.3	41.7	1.92 (1.00)
Arabic Language	12.5	43.8	37.5	0.0	6.3	3.56 (0.96)
English Language	16.7	50.0	27.8	5.6	0.0	3.78 (0.81)
Mathematics	22.2	44.4	33.3	0.0	0.0	3.89 (0.78)
Specialized Subject Matters in The Arts						
General Science	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
History	25.0	37.5	25.0	12.5	0.0	3.75 (1.04)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	16.7	16.7	33.3	33.3	0.0	3.17 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Physics	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	33.3	0.0	0.0	66.7	0.0	3.00 (1.73)

Item IID 2d: To what degree is the textbook satisfactory in terms of integration of concepts and topics?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.60)
Arabic Language	12.5	37.5	50.0	0.0	0.0	3.63 (0.72)
English Language	11.1	38.9	38.9	11.1	0.0	3.50 (0.86)
Mathematics	11.1	33.3	33.3	22.2	0.0	3.33 (1.00)
Specialized Subject Matters in The Arts						
General Science	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
History	37.5	12.5	37.5	12.5	0.0	3.75 (1.17)
Geography	14.3	14.3	71.4	0.0	0.0	3.43 (0.79)
Civic Education	16.7	66.7	16.7	0.0	0.0	3.17 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IID 2e: To what degree is the textbook satisfactory in terms of flexibility and variations between concept topics and textbook content?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	50.0	33.3	1.83 (0.72)
Arabic Language	6.3	31.3	56.3	6.3	0.0	3.38 (0.72)
English Language	5.6	33.3	44.4	16.7	0.0	3.28 (0.83)
Mathematics	11.1	22.2	55.6	11.1	0.0	3.33 (0.87)
Specialized Subject Matters in The Arts						
General Science	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
History	25.0	25.0	37.5	12.5	0.0	3.63 (1.06)
Geography	14.3	14.3	57.1	14.3	0.0	3.29 (0.95)
Civic Education	16.7	0.0	50.0	33.3	0.0	3.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
Biology	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IID 2f: To what degree is the textbook satisfactory in terms of integration between its content and other subject matters without unnecessary repetition?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	0.0	66.7	16.7	2.17 (0.94)
Arabic Language	6.3	62.5	18.8	12.5	0.0	3.63 (0.81)
English Language	0.0	29.4	47.1	23.5	0.0	3.06 (0.75)
Mathematics	11.1	11.1	44.4	11.1	22.2	2.78 (1.30)
Specialized Subject Matters in The Arts						
General Science	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
History	12.5	25.0	50.0	0.0	12.5	3.25 (1.17)
Geography	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
Civic Education	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Physics	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
Biology	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IID 2g: To what degree is the textbook satisfactory in terms of its content and amount of instructional time allowed?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	58.3	16.7	2.08 (0.67)
Arabic Language	6.3	56.3	31.3	0.0	6.3	3.56 (0.89)
English Language	0.0	44.4	44.4	11.1	0.0	3.33 (0.69)
Mathematics	0.0	55.6	44.4	0.0	0.0	3.56 (0.53)
Specialized Subject Matters in The Arts						
General Science	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	0.0	50.0	50.0	0.0	0.0	3.50 (0.54)
Geography	14.3	42.9	28.6	14.3	0.0	3.57 (0.98)
Civic Education	0.0	66.7	16.7	16.7	0.0	3.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IID 3a: If the textbook your teachers use has exercises that are used as student homework or classwork, to what extent are there some exercises that help in diagnosing the weaknesses of the students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	33.3	66.7	0.0	2.33 (0.49)
Arabic Language	12.5	56.3	25.0	0.0	6.3	3.69 (0.95)
English Language	0.0	22.2	38.9	27.8	11.1	2.72 (0.96)
Mathematics	0.0	33.3	44.4	22.2	0.0	3.11 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
History	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
Geography	14.3	57.1	14.3	14.3	0.0	3.71 (0.95)
Civic Education	16.7	50.0	0.0	16.7	16.7	3.33 (1.51)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)

Item IID 3b: If the textbook your teachers use has exercises that are used as student homework or classwork, to what degree are the activities suggested in the textbook practicable?

	Fully / Greatly		Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	9.1	27.3	54.5	9.1	2.36 (0.81)
Arabic Language	12.5	37.5	31.3	12.5	6.3	3.38 (1.09)
English Language	11.1	33.3	44.4	11.1	0.0	3.44 (0.86)
Mathematics	0.0	11.1	55.6	33.3	0.0	2.78 (0.67)
Specialized Subject Matters in The Arts						
General Science	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
History	0.0	37.5	62.5	0.0	0.0	3.38 (0.52)
Geography	0.0	14.3	85.7	0.0	0.0	3.14 (0.38)
Civic Education	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Physics	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)
Biology	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IID 3c: If the textbook your teachers use has exercises that are used as student homework or classwork, to what extent are the activities suitable to the students of this age group?

	Fully / Greatly		Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	83.3	16.7	1.83 (0.39)
Arabic Language	18.8	31.3	43.8	6.3	0.0	3.63 (0.89)
English Language	11.1	38.9	44.4	5.6	0.0	3.56 (0.78)
Mathematics	0.0	11.1	55.6	33.3	0.0	2.78 (0.67)
Specialized Subject Matters in The Arts						
General Science	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
History	0.0	50.0	37.5	12.5	0.0	3.38 (0.74)
Geography	0.0	28.6	71.4	0.0	0.0	3.29 (0.49)
Civic Education	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IID 3d: If the textbook your teachers use has exercises that are used as student homework or classwork, to what extent does the student feel motivated in solving the exercise?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	33.3	50.0	16.7	2.17 (0.72)
Arabic Language	12.5	43.8	37.5	0.0	6.3	3.56 (0.96)
English Language	5.6	22.2	50.0	22.2	0.0	3.11 (0.83)
Mathematics	0.0	11.1	55.6	22.2	11.1	2.67 (0.87)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
History	0.0	50.0	37.5	12.5	0.0	3.38 (0.74)
Geography	0.0	0.0	71.4	14.3	14.3	2.57 (0.79)
Civic Education	0.0	0.0	66.7	16.7	16.7	2.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IID 3e: If the textbook your teachers use has exercises that are used as student homework or classwork, to what degree are the questions suitable to the mental maturity level of the secondary age group?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	75.0	16.7	1.92 (0.52)
Arabic Language	20.0	26.7	46.7	6.7	0.0	3.60 (0.91)
English Language	5.6	38.9	50.0	5.6	0.0	3.44 (0.71)
Mathematics	0.0	33.3	44.4	11.1	11.1	3.00 (1.00)
Specialized Subject Matters in The Arts						
General Sciences	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	12.5	25.0	37.5	25.0	0.0	3.25 (1.04)
Geography	0.0	14.3	71.4	14.3	0.0	3.00 (0.58)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)

Item IID 4a: To what degree is the textbook satisfactory in terms of design and layout (titles, table of contents, tables, examples, etc.)?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	66.7	33.3	1.67 (0.49)
Arabic Language	33.3	40.0	13.3	13.3	0.0	3.93 (1.03)
English Language	23.5	47.1	23.5	5.9	0.0	3.88 (0.86)
Mathematics	22.2	55.6	22.2	0.0	0.0	4.00 (0.71)
Specialized Subject Matters in The Arts						
General Sciences	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
History	57.1	14.3	0.0	28.6	0.0	4.00 (1.41)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	33.3	33.3	33.3	0.0	0.0	4.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IID 4b: To what degree is the textbook satisfactory in terms of binding?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	0.0	16.7	33.3	41.7	2.00 (1.21)
Arabic Language	50.0	43.8	6.3	0.0	0.0	4.44 (0.63)
English Language	27.8	50.0	16.7	5.6	0.0	4.00 (0.84)
Mathematics	22.2	66.7	11.1	0.0	0.0	4.11 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	20.0	80.0	0.0	0.0	0.0	4.20 (0.45)
History	50.0	25.0	12.5	12.5	0.0	4.13 (1.13)
Geography	42.9	42.9	14.3	0.0	0.0	4.29 (0.76)
Civic Education	33.3	33.3	16.7	16.7	0.0	3.83 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
Physics	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	33.3	66.7	0.0	0.0	0.0	4.33 (0.58)

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Item IID 4c: To what degree is the textbook satisfactory in terms of type size?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	8.3	41.7	41.7	1.83 (0.94)
Arabic Language	56.3	37.5	0.0	6.3	0.0	4.44 (0.81)
English Language	33.3	61.1	5.6	0.0	0.0	4.28 (0.58)
Mathematics	33.3	66.7	0.0	0.0	0.0	4.33 (0.50)
Specialized Subject Matters in The Arts						
General Sciences	50.0	33.3	16.7	0.0	0.0	4.33 (0.82)
History	25.0	25.0	25.0	25.0	0.0	3.50 (1.20)
Geography	42.9	28.6	28.6	0.0	0.0	4.14 (0.90)
Civic Education	33.3	33.3	16.7	16.7	0.0	3.83 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)

Item IID 4d: To what degree is the textbook satisfactory in terms of size of the book and the number of pages?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	25.0	41.7	25.0	2.17 (0.94)
Arabic Language	60.0	20.0	6.7	6.7	6.7	4.20 (1.27)
English Language	22.2	72.2	5.6	0.0	0.0	4.17 (0.51)
Mathematics	22.2	77.8	0.0	0.0	0.0	4.22 (0.44)
Specialized Subject Matters in The Arts						
General Sciences	33.3	66.7	0.0	0.0	0.0	4.33 (0.52)
History	0.0	37.5	37.5	12.5	12.5	3.00 (1.07)
Geography	14.3	28.6	42.9	14.3	0.0	3.43 (0.98)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
Physics	66.7	0.0	33.3	0.0	0.0	4.33 (1.16)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)

Item IID 4e: To what degree is the textbook satisfactory in terms of number, suitability, and usefulness of illustrations to assist in learning?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	25.0	58.3	8.3	2.42 (1.00)
Arabic Language	6.3	56.3	31.3	6.3	0.0	3.63 (0.72)
English Language	22.2	61.1	11.1	5.6	0.0	4.00 (0.77)
Mathematics	11.1	44.4	33.3	11.1	0.0	3.56 (0.88)
Specialized Subject Matters in The Arts						
General Sciences	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
History	37.5	12.5	25.0	0.0	25.0	3.38 (1.69)
Geography	14.3	42.9	28.6	14.3	0.0	3.57 (0.98)
Civic Education	16.7	33.3	16.7	33.3	0.0	3.33 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)

Item IID 4f: To what degree is the textbook satisfactory in terms of illustrations using realistic proportions and comparisons in relation to nature and in relation to other objects?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	16.7	0.0	58.3	16.7	2.42 (1.24)
Arabic Language	18.8	56.3	18.8	6.3	0.0	3.88 (0.81)
English Language	16.7	44.4	33.3	5.6	0.0	3.72 (0.83)
Mathematics	11.1	66.7	22.2	0.0	0.0	3.89 (0.60)
Specialized Subject Matters in The Arts						
General Sciences	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
History	37.5	12.5	25.0	0.0	25.0	3.38 (1.69)
Geography	0.0	71.4	14.3	0.0	14.3	3.43 (1.13)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IID 4g: To what degree is the textbook satisfactory in terms of artistic quality and attractiveness of illustration?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	9.1	9.1	36.4	36.4	9.1	2.73 (1.10)
Arabic Language	31.3	50.0	6.3	12.5	0.0	4.00 (0.97)
English Language	27.8	55.6	16.7	0.0	0.0	4.11 (0.68)
Mathematics	22.2	33.3	44.4	0.0	0.0	3.78 (0.83)
Specialized Subject Matters in The Arts						
General Sciences	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
History	16.7	33.3	16.7	0.0	33.3	3.00 (1.67)
Geography	0.0	57.1	14.3	14.3	14.3	3.14 (1.22)
Civic Education	0.0	66.7	0.0	33.3	0.0	3.33 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
Biology	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
Human Culture	0.0	66.7	0.0	33.3	0.0	3.33 (1.16)

Part II Section E
Teacher Manual
(Teacher)

Item IIE 1a: To what extent does the teacher's manual offer adequate evaluation procedures of assessing factual recall?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	27.5	25.0	31.3	8.7	7.5	3.56 (1.20)
Arabic Language	11.5	23.9	30.1	20.4	14.2	2.98 (1.22)
English Language	9.0	41.0	41.0	7.0	2.0	3.48 (0.84)
Mathematics	6.7	27.6	26.7	21.9	17.1	2.85 (1.20)
Specialized Subject Matters in The Arts						
General Science	14.3	25.0	46.4	14.3	0.0	3.39 (0.92)
History	16.4	31.1	27.9	11.5	13.1	3.26 (1.25)
Geography	12.3	31.5	23.3	16.4	16.4	3.07 (1.28)
Civic Education	18.4	28.9	26.3	15.8	10.5	3.29 (1.25)
Specialized Subject Matters in The Sciences						
Chemistry	17.0	30.2	34.0	13.2	5.7	3.40 (1.10)
Physics	7.1	26.8	37.5	12.5	16.1	2.96 (1.16)
Biology	18.0	40.0	28.0	8.0	6.0	3.56 (1.07)
Human Culture	18.8	28.1	25.0	12.5	15.6	3.22 (1.34)

Item IIE 1b: To what extent does the teacher's manual offer adequate evaluation procedures of assessing comprehension?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.5	30.0	30.0	13.7	3.7	3.54 (1.10)
Arabic Language	12.8	29.1	29.1	16.2	12.8	3.13 (1.21)
English Language	13.1	62.6	21.2	3.0	0.0	3.86 (0.67)
Mathematics	11.4	26.7	21.0	25.7	15.2	2.93 (1.27)
Specialized Subject Matters in The Arts						
General Science	21.4	17.9	50.0	10.7	0.0	3.50 (0.96)
History	18.3	28.3	26.7	13.3	13.3	3.25 (1.28)
Geography	6.8	35.1	24.3	20.3	13.5	3.01 (1.18)
Civic Education	15.4	35.9	23.1	15.4	10.3	3.31 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	35.8	37.7	13.2	1.9	3.42 (0.93)
Physics	3.6	28.6	37.5	12.5	17.9	2.88 (1.13)
Biology	14.0	40.0	36.0	6.0	4.0	3.54 (0.95)
Human Culture	15.6	18.8	34.4	21.9	9.4	3.09 (1.20)

Item IIE 1c: To what extent does the teacher's manual offer adequate evaluation procedures of assessing ability to analyze?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.8	24.1	35.4	15.2	2.5	3.49 (1.09)
Arabic Language	12.9	30.2	25.9	19.0	12.1	3.13 (1.22)
English Language	7.0	26.0	50.0	15.0	2.0	3.21 (0.86)
Mathematics	8.6	24.8	21.9	30.5	14.3	2.83 (1.21)
Specialized Subject Matters in The Arts						
General Science	21.4	21.4	28.6	25.0	3.6	3.32 (1.19)
History	19.4	29.0	19.4	14.5	17.7	3.18 (1.39)
Geography	8.3	31.9	22.2	20.8	16.7	2.94 (1.24)
Civic Education	17.9	30.8	20.5	23.1	7.7	3.28 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	34.0	34.0	17.0	7.5	3.17 (1.05)
Physics	0.0	25.0	39.3	16.1	19.6	2.70 (1.06)
Biology	16.7	37.5	35.4	8.3	2.1	3.58 (0.94)
Human Culture	15.6	31.3	18.8	18.8	15.6	3.13 (1.34)

Item IIE 1d: To what extent does the teacher's manual offer adequate evaluation procedures of assessing ability to apply?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	21.2	22.5	32.5	17.5	6.3	3.35 (1.18)
Arabic Language	15.7	27.8	28.7	13.9	13.9	3.17 (1.26)
English Language	6.1	32.7	45.9	12.2	3.1	3.27 (0.87)
Mathematics	9.5	24.8	29.5	21.9	14.3	2.93 (1.20)
Specialized Subject Matters in The Arts						
General Science	21.4	25.0	28.6	17.9	7.1	3.36 (1.22)
History	19.7	31.1	16.4	16.4	16.4	3.21 (1.38)
Geography	9.7	31.9	27.8	9.7	20.8	3.00 (1.29)
Civic Education	15.8	26.3	23.7	26.3	7.9	3.16 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	34.0	28.3	22.6	3.8	3.26 (1.06)
Physics	1.8	17.9	39.3	23.2	17.9	2.63 (1.04)
Biology	14.3	40.8	34.7	8.2	2.0	3.57 (0.91)
Human Culture	18.8	12.5	31.3	25.0	12.5	3.00 (1.30)

Item IIE 1e: To what extent does the teacher's manual offer adequate evaluation procedures of assessing problem-solving ability?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	19.5	16.9	40.3	16.9	6.5	3.26 (1.15)
Arabic Language	9.5	22.4	30.2	15.5	22.4	2.81 (1.28)
English Language	5.0	25.0	44.0	14.0	12.0	2.97 (1.04)
Mathematics	7.8	15.5	24.3	34.0	18.4	2.60 (1.18)
Specialized Subject Matters in The Arts						
General Science	17.9	25.0	25.0	14.3	17.9	3.11 (1.37)
History	14.8	23.0	26.2	13.1	23.0	2.93 (1.38)
Geography	11.1	31.9	20.8	16.7	19.4	2.99 (1.32)
Civic Education	15.4	28.2	25.6	20.5	10.3	3.18 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	32.1	30.2	17.0	11.3	3.11 (1.16)
Physics	3.6	17.9	23.2	30.4	25.0	2.45 (1.16)
Biology	21.3	19.1	46.8	4.3	8.5	3.40 (1.14)
Human Culture	15.6	18.8	21.9	28.1	15.6	2.91 (1.33)

Item IIE 2a: To what extent is the content of the teacher's manual presented clearly?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	26.0	24.7	31.2	14.3	3.9	3.55 (1.14)
Arabic Language	15.8	31.6	22.8	18.4	11.4	3.22 (1.25)
English Language	22.0	54.0	21.0	2.0	1.0	3.94 (0.78)
Mathematics	8.6	23.8	19.0	26.7	21.9	2.71 (1.29)
Specialized Subject Matters in The Arts						
General Science	14.8	22.2	40.7	14.8	7.4	3.22 (1.12)
History	19.7	19.7	26.2	9.8	24.6	3.00 (1.45)
Geography	13.7	28.8	21.9	13.7	21.9	2.99 (1.37)
Civic Education	25.6	23.1	23.1	17.9	10.3	3.36 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	26.4	32.1	22.6	9.4	3.04 (1.13)
Physics	3.6	12.5	28.6	37.5	17.9	2.46 (1.04)
Biology	12.5	27.1	35.4	22.9	2.1	3.25 (1.02)
Human Culture	16.1	29.0	29.0	16.1	9.7	3.26 (1.21)

Item IIE 2b: To what extent is the content of the teacher's manual recent and timely?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.3	22.8	31.6	21.5	3.8	3.34 (1.14)
Arabic Language	15.0	30.1	24.8	18.6	11.5	3.19 (1.24)
English Language	15.0	42.0	39.0	4.0	0.0	3.68 (0.78)
Mathematics	6.7	19.2	23.1	30.8	20.2	2.62 (1.20)
Specialized Subject Matters in The Arts						
General Science	18.5	3.7	37.0	25.9	14.8	2.85 (1.29)
History	16.1	24.2	29.0	8.1	22.6	3.03 (1.38)
Geography	11.1	34.7	13.9	16.7	23.6	2.93 (1.39)
Civic Education	17.9	28.2	23.1	15.4	15.4	3.18 (1.34)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	20.8	34.0	26.4	5.7	3.09 (1.11)
Physics	3.6	20.0	25.5	27.3	23.6	2.53 (1.17)
Biology	10.2	26.5	32.7	26.5	4.1	3.12 (1.05)
Human Culture	12.5	12.5	31.3	31.3	12.5	2.81 (1.20)

Item IIE 3a: To what degree are the ideas, suggestions and activities presented in the teacher's manual useful and relevant?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	23.7	25.0	28.7	16.2	6.3	3.44 (1.20)
Arabic Language	20.4	25.7	29.2	15.0	9.7	3.32 (1.23)
English Language	9.2	46.9	39.8	4.1	0.0	3.61 (0.71)
Mathematics	8.5	29.2	28.3	24.5	9.4	3.03 (1.13)
Specialized Subject Matters in The Arts						
General Science	19.2	19.2	30.8	19.2	11.5	3.15 (1.29)
History	25.8	30.6	25.8	4.8	12.9	3.52 (1.29)
Geography	16.2	28.4	25.7	14.9	14.9	3.16 (1.29)
Civic Education	33.3	33.3	17.9	7.7	7.7	3.77 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	34.0	35.8	15.1	1.9	3.42 (0.97)
Physics	3.6	33.9	26.8	16.1	19.6	2.86 (1.20)
Biology	10.2	34.7	34.7	16.3	4.1	3.31 (1.00)
Human Culture	18.8	28.1	25.0	15.6	12.5	3.25 (1.30)

Item IIE 3b: To what degree are the ideas suggestions and activities presented in the teacher's manual practical to implement?

	Full, Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	21.8	21.8	28.2	20.5	7.7	3.30 (1.24)
Arabic Language	19.3	29 8	23.7	15.8	11.4	3.30 (1.27)
English Language	2.0	49.0	46.0	3.0	0.0	3.50 (0.60)
Mathematics	8.6	26.7	36.2	20.0	8.6	3.07 (1.08)
Specialized Subject Matters in The Arts						
General Science	25.9	14.8	33.3	18.5	7.4	3.33 (1.27)
History	21.0	29.0	29.0	8.1	12.9	3.37 (1.27)
Geography	16.4	31.5	24.7	8.2	19.2	3.18 (1.35)
Civic Education	25.6	41.0	20.5	7.7	5.1	3.74 (1.09)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	34.0	45.3	3.8	3.8	3.49 (0.91)
Physics	1.8	18.2	49.1	20.0	10.9	2.80 (0.93)
Biology	12.8	36.2	38.3	6.4	6.4	3.43 (1.02)
Human Culture	16.1	32.3	29.0	12.9	9.7	3.32 (1.19)

Item IIE 3c: To what degree are the ideas suggestions and activities presented in the teacher's manual interesting and enjoyed by the students?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	10.7	25.3	34.7	22.7	6.7	3.11 (1.09)
Arabic Language	17.9	24.1	26.8	17.9	13.4	3.15 (1.29)
English Language	0.0	34.7	59.2	5.1	1.0	3.28 (0.61)
Mathematics	6.2	16.5	30.9	26.8	19.6	2.63 (1.16)
Specialized Subject Matters in The Arts						
General Science	8.3	20.8	41.7	25.0	4.2	3.04 (1.00)
History	17.7	27.4	30.6	9.7	14.5	3.24 (1.28)
Geography	11.0	28.8	31.5	6.8	21.9	3.00 (1.30)
Civic Education	12.8	33.3	30.8	12.8	10.3	3.26 (1.16)
Specialized Subject Matters in The Sciences						
Chemistry	3.8	25.0	48.1	19.2	3.8	3.06 (0.87)
Physics	3.6	20.0	32.7	23.6	20.0	2.64 (1.13)
Biology	10.2	28.6	40.8	14.3	6.1	3.22 (1.03)
Human Culture	15.6	18.8	28.1	25.0	12.5	3.00 (1.27)

Item IIE 3d: To what degree are the ideas suggestions and activities presented in the teacher's manual fully involving the students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	10.1	30.4	31.6	19.0	8.9	3.14 (1.12)
Arabic Language	17.1	21.6	31.5	19.8	9.9	3.16 (1.22)
English Language	1.0	30.9	53.6	13.4	1.0	3.18 (0.71)
Mathematics	6.6	24.5	28.3	20.8	19.8	2.77 (1.21)
Specialized Subject Matters in The Arts						
General Science	3.7	25.9	40.7	22.2	7.4	2.96 (0.98)
History	21.3	14.8	42.6	14.8	6.6	3.30 (1.16)
Geography	12.3	26.0	28.8	13.7	19.2	2.99 (1.30)
Civic Education	10.3	30.8	30.8	17.9	10.3	3.13 (1.15)
Specialized Subject Matters in The Sciences						
Chemistry	3.9	35.3	35.3	19.6	5.9	3.12 (0.97)
Physics	1.9	25.9	31.5	27.8	13.0	2.76 (1.05)
Biology	8.2	26.5	46.9	16.3	2.0	3.22 (0.90)
Human Culture	12.5	21.9	25.0	25.0	15.6	2.91 (1.28)

Item IIE 3e(i): To what degree are the ideas suggestions and activities presented in the teacher's manual suitable for the learning capabilities of below average students

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.7	26.9	38.5	16.7	1.3	3.41 (1.00)
Arabic Language	15.0	24.8	32.7	18.6	8.8	3.19 (1.17)
English Language	1.0	18.4	37.8	36.7	6.1	2.71 (0.87)
Mathematics	6.8	26.2	30.1	23.3	13.6	2.89 (1.15)
Specialized Subject Matters in The Arts						
General Science	11.5	19.2	26.9	26.9	15.4	2.85 (1.26)
History	14.8	31.1	29.5	9.8	14.8	3.21 (1.25)
Geography	15.1	21.9	20.5	23.3	19.2	2.90 (1.36)
Civic Education	7.7	35.9	33.3	10.3	12.8	3.15 (1.14)
Specialized Subject Matters in The Sciences						
Chemistry	5.8	17.3	38.5	30.8	7.7	2.83 (1.00)
Physics	5.5	9.1	41.8	32.7	10.9	2.66 (0.99)
Biology	10.0	28.0	38.0	18.0	6.0	3.18 (1.04)
Human Culture	9.4	31.3	34.4	15.6	9.4	3.16 (1.11)

Item IIE 3e(ii): To what degree are the ideas suggestions and activities presented in the teacher's manual suitable for the learning capabilities of average students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.8	31.6	32.9	17.1	2.6	3.41 (1.04)
Arabic Language	20.0	27.0	33.9	14.8	4.3	3.44 (1.10)
English Language	3.0	38.4	48.5	10.1	0.0	3.34 (0.70)
Mathematics	6.9	35.3	31.4	16.7	9.8	3.13 (1.09)
Specialized Subject Matters in The Arts						
General Science	7.4	40.7	33.3	7.4	11.1	3.26 (1.10)
History	16.4	41.0	21.3	16.4	4.9	3.48 (1.11)
Geography	13.7	21.9	32.9	17.8	13.7	3.04 (1.23)
Civic Education	15.8	36.8	31.6	5.3	10.5	3.42 (1.15)
Specialized Subject Matters in The Sciences						
Chemistry	5.9	29.4	43.1	19.6	2.0	3.18 (0.89)
Physics	5.4	33.9	30.4	17.9	12.5	3.02 (1.12)
Biology	10.2	40.8	40.8	6.1	2.0	3.51 (0.85)
Human Culture	9.4	34.4	28.1	21.9	6.3	3.19 (1.09)

Item IIE 3e(iii): To what degree are the ideas suggestions and activities presented in the teacher's manual suitable for the learning capabilities of superior students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	19.5	32.5	26.0	14.3	7.8	3.42 (1.19)
Arabic Language	19.8	37.9	23.3	12.9	6.0	3.53 (1.13)
English Language	11.3	40.2	35.1	9.3	4.1	3.45 (0.96)
Mathematics	27.5	30.4	18.6	14.7	8.8	3.53 (1.28)
Specialized Subject Matters in The Arts						
General Science	26.9	38.5	11.5	19.2	3.8	3.65 (1.20)
History	36.1	24.6	21.3	11.5	6.6	3.72 (1.25)
Geography	26.0	27.4	24.7	8.2	13.7	3.44 (1.33)
Civic Education	30.8	23.1	30.8	7.7	7.7	3.62 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	17.6	41.2	17.6	17.6	5.9	3.47 (1.16)
Physics	20.0	30.9	20.0	16.4	12.7	3.29 (1.32)
Biology	20.0	42.0	28.0	8.0	2.0	3.70 (0.95)
Human Culture	21.9	34.4	25.0	12.5	6.3	3.53 (1.16)

Item IIE 4a: In the teacher's manual, to what degree are subject-matter topics and activities presented in a coherent, step-by-step manner?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	26.0	31.2	20.8	14.3	7.8	3.53 (1.24)
Arabic Language	19.3	34.2	26.3	14.0	6.1	3.47 (1.14)
English Language	22.4	51.0	22.4	4.1	0.0	3.92 (0.78)
Mathematics	6.7	26.9	28.8	21.2	16.3	2.87 (1.18)
Specialized Subject Matters in The Arts						
General Science	23.1	42.3	19.2	15.4	0.0	3.73 (1.00)
History	27.9	32.8	18.0	4.9	16.4	3.51 (1.39)
Geography	13.5	35.1	17.6	14.9	18.9	3.10 (1.35)
Civic Education	17.9	48.7	17.9	5.1	10.3	3.59 (1.16)
Specialized Subject Matters in the Sciences						
Chemistry	9.6	34.6	42.3	11.5	1.9	3.39 (0.89)
Physics	7.1	25.0	30.4	19.6	17.9	2.84 (1.20)
Biology	24.0	30.0	32.0	10.0	4.0	3.60 (1.09)
Human Culture	15.6	37.5	28.1	9.4	9.4	3.41 (1.16)

Item IIE 4b: In the teacher's manual, to what degree are instructional objectives stated?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	24.4	41.0	14.1	12.8	7.7	3.62 (1.21)
Arabic Language	22.5	28.8	33.3	9.0	6.3	3.52 (1.13)
English Language	17.7	49.0	22.9	10.4	0.0	3.74 (0.87)
Mathematics	14.4	24.0	29.8	19.2	12.5	3.09 (1.23)
Specialized Subject Matters in The Arts						
General Science	44.0	20.0	28.0	8.0	0.0	4.00 (1.04)
History	34.4	32.8	13.1	13.1	6.6	3.75 (1.25)
Geography	23.0	32.4	21.6	8.1	14.9	3.41 (1.33)
Civic Education	28.2	38.5	15.4	5.1	12.8	3.64 (1.31)
Specialized Subject Matters in The Sciences						
Chemistry	15.4	50.0	30.8	1.9	1.9	3.75 (0.81)
Physics	5.4	39.3	26.8	17.9	10.7	3.11 (1.11)
Biology	20.4	38.8	22.4	14.3	4.1	3.57 (1.10)
Human Culture	25.8	25.8	32.3	6.5	9.7	3.52 (1.24)

Item IIE 4c(i): If unstated in the teacher's manual, to what degree are instructional objectives obvious to the teacher?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	36.0	26.7	20.0	8.0	9.3	3.72 (1.29)
Arabic Language	27.0	39.6	24.3	7.2	1.8	3.83 (0.97)
English Language	12.8	41.9	32.6	8.1	4.7	3.50 (0.98)
Mathematics	25.7	31.4	18.1	15.2	9.5	3.49 (1.29)
Specialized Subject Matters in The Arts						
General Science	33.3	33.3	25.9	7.4	0.0	3.93 (0.96)
History	34.5	37.9	15.5	5.2	6.9	3.88 (1.16)
Geography	24.7	42.5	9.6	12.3	11.0	3.58 (1.29)
Civic Education	37.8	45.9	5.4	8.1	2.7	4.08 (1.01)
Specialized Subject Matters in The Sciences						
Chemistry	32.0	30.0	28.0	4.0	6.0	3.78 (1.13)
Physics	27.3	30.9	25.5	12.7	3.6	3.66 (1.13)
Biology	30.6	36.7	22.4	4.1	6.1	3.82 (1.11)
Human Culture	34.4	21.9	34.4	3.1	6.3	3.75 (1.16)

Item IIE 4c(ii): If unstated in the teacher's manual, to what degree are instructional objectives obvious to both the teacher and the student?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.3	24.3	31.1	18.9	5.4	3.35 (1.16)
Arabic Language	17.0	25.9	33.0	17.0	7.1	3.29 (1.15)
English Language	5.9	30.6	45.9	10.6	7.1	3.18 (0.95)
Mathematics	5.9	23.8	27.7	29.7	12.9	2.80 (1.12)
Specialized Subject Matters in The Arts						
General Science	16.0	20.0	32.0	32.0	0.0	3.20 (1.08)
History	10.5	38.6	31.6	10.5	8.8	3.32 (1.09)
Geography	9.9	25.4	26.8	18.3	19.7	2.87 (1.28)
Civic Education	19.4	36.1	19.4	11.1	13.9	3.36 (1.31)
Specialized Subject Matters in The Sciences						
Chemistry	10.0	28.0	38.0	18.0	6.0	3.18 (1.04)
Physics	1.9	29.6	25.9	33.3	9.3	2.82 (1.03)
Biology	18.4	24.5	42.9	8.2	6.1	3.41 (1.08)
Human Culture	15.6	28.1	31.3	18.8	6.3	3.28 (1.14)

Item IIE 4d: In the teacher's manual, to what degree are instructional objectives related to the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	29.1	30.4	17.7	15.2	7.6	3.58 (1.27)
Arabic Language	17.7	39.8	29.2	10.6	2.7	3.59 (0.99)
English Language	14.1	39.1	44.6	2.2	0.0	3.65 (0.75)
Mathematics	13.6	31.1	33.0	15.5	6.8	3.29 (1.10)
Specialized Subject Matters in The Arts						
General Science	25.9	22.2	33.3	18.5	0.0	3.56 (1.09)
History	26.3	38.6	22.8	7.0	5.3	3.74 (1.09)
Geography	24.7	38.4	17.8	11.0	8.2	3.60 (1.21)
Civic Education	30.8	48.7	12.8	5.1	2.6	4.00 (0.95)
Specialized Subject Matters in The Sciences						
Chemistry	15.4	51.9	23.1	7.7	1.9	3.71 (0.89)
Physics	16.1	30.4	37.5	14.3	1.8	3.45 (0.99)
Biology	31.3	31.3	27.1	8.3	2.1	3.81 (1.05)
Human Culture	31.0	34.5	24.1	3.4	6.9	3.79 (1.15)

Item IIE 4e: In the teacher's manual, to what degree are objectives and procedures consistent?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	26.0	28.6	22.1	18.2	5.2	3.52 (1.21)
Arabic Language	21.8	38.2	27.3	9.1	3.6	3.66 (1.04)
English Language	17.6	38.5	36.3	7.7	0.0	3.66 (0.86)
Mathematics	9.3	32.0	29.9	18.6	10.3	3.11 (1.14)
Specialized Subject Matters in The Arts						
General Science	25.9	29.6	25.9	18.5	0.0	3.63 (1.08)
History	21.3	39.3	19.7	6.6	13.1	3.49 (1.27)
Geography	16.9	36.6	18.3	18.3	9.9	3.32 (1.24)
Civic Education	33.3	41.7	22.2	0.0	2.8	4.03 (0.91)
Specialized Subject Matters in The Sciences						
Chemistry	17.6	29.4	39.2	11.8	2.0	3.49 (0.99)
Physics	10.7	21.4	42.9	21.4	3.6	3.14 (1.00)
Biology	18.4	36.7	34.7	8.2	2.0	3.61 (0.95)
Human Culture	20.0	33.3	26.7	13.3	6.7	3.47 (1.17)

Item IIE 4f(i): In the teacher's manual to what degree are major learning outcomes cognitive in nature?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	37.5	15.0	18.8	3.7	3.61 (1.16)
Arabic Language	20.0	41.7	30.4	5.2	2.6	3.71 (0.93)
English Language	10.3	30.9	49.5	9.3	0.0	3.42 (0.80)
Mathematics	10.7	35.0	31.1	18.4	4.9	3.28 (1.04)
Specialized Subject Matters in The Arts						
General Science	23.1	23.1	34.6	19.2	0.0	3.50 (1.07)
History	37.9	32.8	19.0	10.3	0.0	3.98 (1.00)
Geography	30.1	30.1	19.2	8.2	12.3	3.58 (1.33)
Civic Education	47.4	26.3	15.8	7.9	2.6	4.08 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	17.3	46.2	28.8	7.7	0.0	3.73 (0.84)
Physics	21.4	37.5	30.4	8.9	1.8	3.68 (0.97)
Biology	10.2	57.1	20.4	8.2	4.1	3.61 (0.93)
Human Culture	37.5	25.0	21.9	9.4	6.3	3.78 (1.24)

Item IIE 4f(ii): In the teacher's manual to what degree are major learning outcomes affective in nature?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	17.9	26.9	37.2	15.4	2.6	3.42 (1.04)
Arabic Language	16.4	28.2	37.3	13.6	4.5	3.38 (1.06)
English Language	6.3	27.1	49.0	17.7	0.0	3.22 (0.81)
Mathematics	7.9	20.8	32.7	27.7	10.9	2.87 (1.11)
Specialized Subject Matters in The Arts						
General Science	15.4	30.8	26.7	26.9	0.0	3.35 (1.06)
History	20.7	34.5	27.6	15.5	1.7	3.57 (1.05)
Geography	12.5	29.2	34.7	11.1	12.5	3.18 (1.18)
Civic Education	36.8	44.7	10.5	5.3	2.6	4.08 (0.97)
Specialized Subject Matters in The Sciences						
Chemistry	7.7	28.8	38.5	17.3	7.7	3.12 (1.04)
Physics	10.7	10.7	50.0	19.6	8.9	2.95 (1.05)
Biology	6.3	33.3	39.6	20.8	0.0	3.25 (0.86)
Human Culture	21.9	37.5	28.1	6.3	6.3	3.63 (1.10)

Item IIE 4f(iii): In the teacher's manual to what degree are major learning outcomes psychomotor in nature?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.8	30.3	32.9	19.7	1.3	3.40 (1.02)
Arabic Language	14.7	33.9	32.1	13.8	5.5	3.39 (1.07)
English Language	4.2	22.1	49.5	15.8	8.4	2.98 (0.95)
Mathematics	6.8	21.4	35.0	23.3	13.6	2.85 (1.12)
Specialized Subject Matters in The Arts						
General Science	20.0	24.0	20.0	32.0	4.0	3.24 (1.23)
History	15.5	29.3	39.7	10.3	5.2	3.40 (1.04)
Geography	15.3	23.6	31.9	12.5	16.7	3.08 (1.29)
Civic Education	34.2	28.9	18.4	13.2	5.3	3.74 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	7.7	26.9	42.3	21.2	1.9	3.17 (0.92)
Physics	8.9	23.2	44.6	21.4	1.8	3.16 (0.93)
Biology	10.2	36.7	30.6	20.4	2.0	3.33 (0.99)
Human Culture	28.1	28.1	18.8	18.8	6.3	3.53 (1.27)

Item IIE 4g: In the teacher's manual to what degree are suggestions given for a variety of activities and ideas for classroom use?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.3	25.0	38.9	16.7	4.2	3.31 (1.06)
Arabic Language	17.0	29.2	40.6	10.4	2.8	3.47 (0.99)
English Language	4.3	36.2	47.9	10.6	1.1	3.32 (0.77)
Mathematics	4.9	27.5	35.3	21.6	10.8	2.94 (1.06)
Specialized Subject Matters in The Arts						
General Science	31.8	18.2	36.4	9.1	4.5	3.64 (1.18)
History	11.1	48.1	25.9	5.6	9.3	3.46 (1.08)
Geography	13.4	37.3	20.9	13.4	14.9	3.21 (1.27)
Civic Education	24.3	43.2	18.9	10.8	2.7	3.76 (1.04)
Specialized Subject Matters in The Sciences						
Chemistry	7.7	32.7	48.1	9.6	1.9	3.35 (0.84)
Physics	7.5	24.5	50.9	11.3	5.7	3.17 (0.94)
Biology	12.5	35.4	33.3	16.7	2.1	3.40 (0.98)
Human Culture	15.6	18.8	43.8	15.6	6.3	3.22 (1.10)

Item IIE 5: To what extent are special skills or training required before the teacher can use the teacher's manual?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	14.1	39.7	17.9	20.5	7.7	3.32 (1.18)
Arabic Language	15.9	31.8	21.5	21.5	9.3	3.23 (1.23)
English Language	4.2	27.4	41.1	22.1	5.3	3.03 (0.94)
Mathematics	10.7	31.1	27.2	15.5	15.5	3.06 (1.24)
Specialized Subject Matters in The Arts						
General Science	22.7	22.7	18.2	27.3	9.1	3.23 (1.34)
History	21.7	33.3	18.3	18.3	8.3	3.42 (1.25)
Geography	16.2	40.5	16.2	10.8	16.2	3.30 (1.32)
Civic Education	28.9	28.9	13.2	21.1	7.9	3.50 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	35.8	34.0	5.7	11.3	3.34 (1.14)
Physics	9.1	36.4	32.7	14.5	7.3	3.26 (1.06)
Biology	14.9	36.2	31.9	8.5	8.5	3.40 (1.12)
Human Culture	35.5	19.4	22.6	9.7	12.9	3.55 (1.41)

Item IIE 6a: In the teacher's manual, to what degree do you find that the presentation of subject matter is not orderly?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	9.5	29.7	20.3	25.7	14.9	2.93 (1.24)
Arabic Language	16.0	17.0	31.1	18.9	17.0	2.96 (1.30)
English Language	1.0	10.3	34.0	27.8	26.8	2.31 (1.01)
Mathematics	16.2	29.5	25.7	18.1	10.5	3.23 (1.23)
Specialized Subject Matters in The Arts						
General Science	16.7	29.2	33.3	20.8	0.0	3.42 (1.02)
History	15.3	22.0	20.3	22.0	20.3	2.90 (1.37)
Geography	18.9	24.3	21.6	21.6	13.5	3.14 (1.33)
Civic Education	20.5	23.1	20.5	20.5	15.4	3.13 (1.38)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	26.4	28.3	20.8	11.3	3.09 (1.21)
Physics	21.4	33.9	17.9	17.9	8.9	3.41 (1.26)
Biology	8.3	16.7	39.6	14.6	20.8	2.77 (1.21)
Human Culture	9.4	28.1	40.6	12.5	9.4	3.16 (1.08)

Item IIE 6b: To what degree do you find that the teacher's manual is too conforming for the teacher?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.8	32.9	21.1	9.2	21.1	3.13 (1.38)
Arabic Language	19.0	24.8	24.8	12.4	19.0	3.12 (1.38)
English Language	7.3	31.3	29.2	24.0	8.3	3.05 (1.09)
Mathematics	9.8	19.6	27.5	31.4	11.8	2.84 (1.17)
Specialized Subject Matters in The Arts						
General Science	12.0	28.0	36.0	16.0	8.0	3.20 (1.12)
History	23.0	9.8	36.1	19.7	11.5	3.13 (1.30)
Geography	20.8	25.0	19.4	25.0	9.7	3.22 (1.30)
Civic Education	23.1	20.5	20.5	23.1	12.8	3.18 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	13.5	28.8	21.2	25.0	11.5	3.08 (1.25)
Physics	16.1	28.6	32.1	14.3	8.9	3.29 (1.17)
Biology	8.3	16.7	27.1	20.8	27.1	2.58 (1.29)
Human Culture	21.9	34.4	9.4	21.9	12.5	3.31 (1.38)

Item IIE 6c: To what degree do you find that the teacher's manual is too vague and lacks direction for the teacher?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	18.8	26.2	21.2	20.0	13.7	3.16 (1.33)
Arabic Language	21.7	25.5	26.4	13.2	13.2	3.29 (1.31)
English Language	1.1	5.3	29.8	27.7	36.2	2.07 (0.99)
Mathematics	21.4	25.2	23.3	14.6	15.5	3.22 (1.36)
Specialized Subject Matters in The Arts						
General Science	15.4	34.6	30.8	11.5	7.7	3.39 (1.13)
History	26.2	11.5	24.6	13.1	24.6	3.02 (1.52)
Geography	26.0	21.9	17.8	16.4	17.8	3.22 (1.46)
Civic Education	26.3	28.9	10.5	18.4	15.8	3.32 (1.45)
Specialized Subject Matters in The Sciences						
Chemistry	17.0	34.0	28.3	11.3	9.4	3.38 (1.18)
Physics	41.1	25.0	17.9	7.1	8.9	3.82 (1.30)
Biology	12.2	26.5	24.5	14.3	22.4	2.92 (1.35)
Human Culture	15.6	31.3	25.0	15.6	12.5	3.22 (1.26)

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Item IIE 6d: To what degree do you find that the teacher's manual does not clearly define the expected student outcomes?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	9.1	35.1	35.1	10.4	10.4	3.22 (1.10)
Arabic Language	18.5	25.9	28.7	19.4	7.4	3.29 (1.19)
English Language	8.2	15.5	40.2	21.6	14.4	2.81 (1.12)
Mathematics	23.1	14.4	20.2	26.9	15.4	3.03 (1.40)
Specialized Subject Matters in The Arts						
General Science	14.8	22.2	29.6	18.5	14.8	3.04 (1.29)
History	16.9	22.0	32.2	13.6	15.3	3.12 (1.29)
Geography	20.8	26.4	18.1	16.7	18.1	3.15 (1.41)
Civic Education	20.5	30.8	23.1	15.4	10.3	3.36 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	9.4	30.2	45.3	7.5	7.5	3.26 (1.00)
Physics	37.5	23.2	26.8	5.4	7.1	3.79 (1.22)
Biology	6.3	33.3	27.1	16.7	16.7	2.96 (1.20)
Human Culture	15.6	21.9	31.3	15.6	15.6	3.06 (1.29)

Item IIE 7: To what extent are a variety of evaluation methods, besides paper and pencil tests suggested?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	9.5	31.1	39.2	14.9	5.4	3.24 (1.00)
Arabic Language	13.6	24.3	36.9	19.4	5.8	3.20 (1.09)
English Language	1.0	22.9	49.0	20.8	6.3	2.92 (0.85)
Mathematics	6.2	27.8	34.0	13.4	18.6	2.90 (1.19)
Specialized Subject Matters in The Arts						
General Science	18.2	27.3	40.9	0.0	13.6	3.36 (1.22)
History	16.4	24.6	32.8	14.8	11.5	3.20 (1.22)
Geography	12.3	26.0	20.5	19.2	21.9	2.88 (1.35)
Civic Education	15.4	28.2	25.6	17.9	12.8	3.15 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	11.8	19.6	45.1	15.7	7.8	3.12 (1.07)
Physics	14.5	27.3	29.1	18.2	10.9	3.16 (1.21)
Biology	4.3	21.7	41.3	19.6	13.0	2.85 (1.05)
Human Culture	18.8	25.0	37.5	12.5	6.3	3.38 (1.13)

Item IIE 8a: To what extent are the teaching materials and equipment suggested by the teacher's manual available?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.2	21.2	27.5	22.5	12.5	3.06 (1.27)
Arabic Language	13.6	16.4	32.7	19.1	18.2	2.88 (1.28)
English Language	11.2	61.2	25.5	2.0	0.0	3.82 (0.65)
Mathematics	3.0	12.0	38.0	21.0	26.0	2.45 (1.10)
Specialized Subject Matters in The Arts						
General Science	11.1	29.6	29.6	22.2	7.4	3.15 (1.13)
History	4.9	27.9	26.2	21.3	19.7	2.77 (1.20)
Geography	10.8	12.2	29.7	23.0	24.3	2.62 (1.28)
Civic Education	15.4	12.8	35.9	28.2	7.7	3.00 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	7.5	34.0	37.7	15.1	5.7	3.23 (0.99)
Physics	3.6	32.1	35.7	16.1	12.5	2.98 (1.07)
Biology	16.3	28.6	36.7	12.2	6.1	3.37 (1.09)
Human Culture	6.3	31.3	28.1	21.9	12.5	2.97 (1.15)

Item IIE 8b(i): To what extent are the teaching materials and equipment suggested by the teacher's manual easy to use by the teacher?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	21.8	23.1	23.1	21.8	10.3	3.24 (1.30)
Arabic Language	14.2	34.9	24.5	16.0	10.4	3.26 (1.20)
English Language	17.5	57.7	21.6	3.1	0.0	3.90 (0.71)
Mathematics	15.3	16.3	34.7	16.3	17.3	2.96 (1.28)
Specialized Subject Matters in The Arts						
General Science	30.8	26.9	26.9	15.4	0.0	3.73 (1.08)
History	27.9	16.4	29.5	11.5	14.8	3.31 (1.39)
Geography	20.5	31.5	16.4	15.1	16.4	3.25 (1.38)
Civic Education	23.1	28.2	28.2	15.4	5.1	3.49 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	17.0	52.8	18.9	7.5	3.8	3.72 (0.97)
Physics	25.0	42.9	19.6	7.1	5.4	3.75 (1.08)
Biology	22.9	43.8	29.2	4.2	0.0	3.85 (0.83)
Human Culture	16.1	25.8	32.3	12.9	12.9	3.19 (1.25)

Item IIE 8b(ii): To what extent are the teaching materials and equipment suggested by the teacher's manual easy to use by the students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	13.2	26.3	31.6	23.7	5.3	3.18 (1.10)
Arabic Language	7.5	19.8	34.9	19.8	17.9	2.79 (1.18)
English Language	8.2	43.3	34.0	11.3	3.1	3.42 (0.91)
Mathematics	5.1	13.1	27.3	33.3	21.2	2.48 (1.12)
Specialized Subject Matters in The Arts						
General Science	4.2	25.0	20.8	37.5	12.5	2.71 (1.12)
History	13.1	11.5	41.0	16.4	18.0	2.85 (1.24)
Geography	8.6	18.6	27.1	22.9	22.9	2.67 (1.26)
Civic Education	10.3	17.9	28.2	28.2	15.4	2.80 (1.22)
Specialized Subject Matters in The Sciences						
Chemistry	5.7	17.0	50.9	17.0	9.4	2.93 (0.98)
Physics	5.4	23.2	32.1	28.6	10.7	2.84 (1.08)
Biology	6.1	28.6	42.9	20.4	2.0	3.16 (0.90)
Human Culture	10.3	20.7	27.6	31.0	10.3	2.90 (1.18)

Item IIE 9a: To what degree is the teacher's manual helpful in promoting the teacher's understanding of the concept in order to be able to present it in class?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.1	26.0	29.9	10.4	11.7	3.36 (1.27)
Arabic Language	20.0	34.5	23.6	14.5	7.3	3.46 (1.18)
English Language	19.2	51.5	19.2	6.1	4.0	3.76 (0.97)
Mathematics	11.1	27.3	23.2	25.3	13.1	2.98 (1.23)
Specialized Subject Matters in The Arts						
General Science	25.0	25.0	33.3	12.5	4.2	3.54 (1.14)
History	36.1	19.7	24.6	14.8	4.9	3.67 (1.25)
Geography	20.3	29.7	20.3	12.2	17.6	3.23 (1.38)
Civic Education	30.8	41.0	17.9	7.7	2.6	3.90 (1.02)
Specialized Subject Matters in The Sciences						
Chemistry	13.5	48.1	30.8	7.7	0.0	3.67 (0.81)
Physics	5.4	33.9	39.3	8.9	12.5	3.11 (1.07)
Biology	19.1	40.4	27.7	12.8	0.0	3.66 (0.94)
Human Culture	18.8	28.1	34.4	0.0	18.8	3.28 (1.33)

Item IIE 9b: To what degree is the teacher's manual helpful in suggesting new ideas to facilitate the students' understanding of the concepts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	13.3	24.0	36.0	18.7	8.0	3.16 (1.13)
Arabic Language	15.5	32.7	32.7	13.6	5.5	3.39 (1.08)
English Language	12.1	31.3	40.4	11.1	5.1	3.34 (1.00)
Mathematics	7.0	30.0	28.0	21.0	14.0	2.95 (1.17)
Specialized Subject Matters in The Arts						
General Science	29.2	25.0	29.2	8.3	8.3	3.58 (1.25)
History	23.0	26.2	24.6	18.0	8.2	3.38 (1.25)
Geography	19.4	33.3	20.8	12.5	13.9	3.32 (1.31)
Civic Education	20.5	38.5	25.6	12.8	2.6	3.62 (1.04)
Specialized Subject Matters in The Sciences						
Chemistry	15.1	20.8	41.5	18.9	3.8	3.25 (1.05)
Physics	3.6	25.0	44.6	19.6	7.1	2.98 (0.94)
Biology	8.7	34.8	43.5	13.0	0.0	3.39 (0.83)
Human Culture	15.6	25.0	31.3	9.4	18.8	3.09 (1.33)

Item IIE 9c: To what degree is the teacher's manual helpful in suggesting extra charts and figures to facilitate the concept acquisition?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.9	24.7	28.6	20.8	9.1	3.20 (1.21)
Arabic Language	20.2	28.4	26.6	16.5	8.3	3.36 (1.21)
English Language	6.1	25.5	48.0	14.3	6.1	3.11 (0.94)
Mathematics	9.1	20.2	32.3	25.3	13.1	2.87 (1.16)
Specialized Subject Matters in The Arts						
General Science	20.0	24.0	36.0	16.0	4.0	3.40 (1.12)
History	21.3	27.9	26.2	16.4	8.2	3.38 (1.23)
Geography	19.4	29.2	20.8	15.3	15.3	3.22 (1.35)
Civic Education	23.1	35.9	15.4	20.5	5.1	3.51 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	13.5	17.3	42.3	17.3	9.6	3.08 (1.14)
Physics	3.6	21.4	42.9	23.2	8.9	2.88 (0.97)
Biology	10.2	32.7	38.8	14.3	4.1	3.31 (0.98)
Human Culture	15.6	25.0	31.3	12.5	15.6	3.13 (1.29)

Item IIE 9d: To what degree is the teacher's manual helpful in giving more examples and non-examples of each concept?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	15.1	27.4	30.1	20.5	6.8	3.23 (1.15)
Arabic Language	19.4	26.9	29.6	13.9	10.2	3.32 (1.23)
English Language	4.0	27.3	44.4	18.2	6.1	3.05 (0.93)
Mathematics	7.3	27.1	26.0	25.0	14.6	2.88 (1.18)
Specialized Subject Matters in The Arts						
General Science	16.0	20.0	36.0	12.0	16.0	3.08 (1.29)
History	20.0	28.3	21.7	18.3	11.7	3.27 (1.30)
Geography	20.5	26.0	19.2	15.1	19.2	3.14 (1.42)
Civic Education	28.2	33.3	15.4	20.5	2.6	3.64 (1.18)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	13.2	37.7	20.8	15.1	2.89 (1.22)
Physics	1.8	21.4	42.9	21.4	12.5	2.79 (0.99)
Biology	8.2	18.4	55.1	8.2	10.2	3.06 (1.01)
Human Culture	25.0	18.8	28.1	12.5	15.6	3.25 (1.39)

Item IIE 9e: To what degree is the teacher's manual helpful in suggesting methods of presentation and ideas to relate the concepts to the everyday life activities of the students at this age?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.0	26.7	38.7	10.7	8.0	3.32 (1.12)
Arabic Language	21.1	32.1	25.7	13.8	7.3	3.46 (1.18)
English Language	3.1	32.0	45.4	16.5	3.1	3.16 (0.85)
Mathematics	6.2	23.7	30.9	23.7	15.5	2.81 (1.15)
Specialized Subject Matters in The Arts						
General Science	15.4	23.1	38.5	19.2	3.8	3.27 (1.08)
History	23.7	25.4	28.8	18.6	3.4	3.48 (1.15)
Geography	18.1	25.0	26.4	13.9	16.7	3.14 (1.34)
Civic Education	23.1	35.9	28.2	10.3	2.6	3.67 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	11.8	17.6	41.2	23.5	5.9	3.06 (1.07)
Physics	5.5	21.8	43.6	20.0	9.1	2.95 (1.01)
Biology	4.2	37.5	29.2	22.9	6.3	3.10 (1.02)
Human Culture	18.8	18.8	31.3	21.9	9.4	3.16 (1.25)

Item IIE 9f: To what degree is the teacher's manual helpful in providing the teacher with guidelines to design and select his own or the most relevant examples and non-examples of the concept to be taught?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.3	31.1	32.4	10.8	5.4	3.50 (1.10)
Arabic Language	24.5	33.0	21.7	14.2	6.6	3.55 (1.20)
English Language	8.2	30.6	43.9	12.2	5.1	3.25 (0.95)
Mathematics	9.7	25.8	28.0	23.7	12.9	2.96 (1.19)
Specialized Subject Matters in The Arts						
General Science	18.5	25.9	29.6	18.5	7.4	3.30 (1.20)
History	26.2	24.6	29.5	11.5	8.2	3.49 (1.23)
Geography	15.1	34.2	20.5	12.3	17.8	3.16 (1.33)
Civic Education	23.1	41.0	20.5	10.3	5.1	3.67 (1.11)
Specialized Subject Matters in The Sciences						
Chemistry	13.5	23.1	32.7	23.1	7.7	3.12 (1.15)
Physics	7.1	19.6	48.2	14.3	10.7	2.98 (1.04)
Biology	6.4	51.1	29.8	8.5	4.3	3.47 (0.91)
Human Culture	18.8	25.0	25.0	21.9	9.4	3.22 (1.26)

Item IIE 9g: To what degree is the teacher's manual helpful in providing the teacher with ideas and examples to design assessment of the student's progress?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.2	30.6	26.4	13.9	6.9	3.47 (1.19)
Arabic Language	17.6	29.4	30.4	16.7	5.9	3.36 (1.13)
English Language	4.3	27.2	42.4	19.6	6.5	3.03 (0.95)
Mathematics	7.8	21.1	34.4	23.3	13.3	2.87 (1.13)
Specialized Subject Matters in The Arts						
General Science	26.1	26.1	21.7	17.4	8.7	3.44 (1.31)
History	22.0	30.5	23.7	10.2	13.6	3.37 (1.31)
Geography	11.3	38.0	14.1	22.5	14.1	3.10 (1.28)
Civic Education	23.1	33.3	23.1	12.8	7.7	3.51 (1.21)
Specialized Subject Matters in The Sciences						
Chemistry	13.5	23.1	42.3	15.4	5.8	3.23 (1.06)
Physics	5.4	16.1	44.6	26.8	7.1	2.86 (0.96)
Biology	11.1	26.7	53.3	4.4	4.4	3.36 (0.91)
Human Culture	21.9	18.8	25.0	21.9	12.5	3.16 (1.35)

Item IIE 10a: To what degree does the teacher's manual effectively communicate the instructional objectives?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	30.4	31.6	19.0	12.7	6.3	3.67 (1.22)
Arabic Language	23.4	32.4	28.8	6.3	9.0	3.55 (1.18)
English Language	11.5	44.8	36.5	2.1	5.2	3.55 (0.92)
Mathematics	12.5	32.7	23.1	18.3	13.5	3.13 (1.24)
Specialized Subject Matters in The Arts						
General Science	29.6	25.9	29.6	14.8	0.0	3.70 (1.07)
History	25.0	38.3	23.3	10.0	3.3	3.72 (1.06)
Geography	23.0	36.5	17.6	13.5	9.5	3.50 (1.25)
Civic Education	30.8	33.3	23.1	5.1	7.7	3.74 (1.19)
Specialized Subject Matters in The Sciences						
Chemistry	13.2	49.1	30.2	3.8	3.8	3.64 (0.90)
Physics	7.1	35.7	39.3	14.3	3.6	3.29 (0.93)
Biology	26.5	36.7	28.6	8.2	0.0	3.82 (0.93)
Human Culture	19.4	29.0	29.0	9.7	12.9	3.32 (1.28)

Item IIE 10b: To what degree does the teacher's manual effectively communicate the background needed to understand the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.8	26.6	31.6	13.9	5.1	3.48 (1.14)
Arabic Language	18.9	32.4	29.7	9.9	9.0	3.42 (1.17)
English Language	12.2	40.8	33.7	10.2	3.1	3.49 (0.94)
Mathematics	8.7	23.3	31.1	20.4	16.5	2.87 (1.20)
Specialized Subject Matters in The Arts						
General Science	26.9	7.7	42.3	15.4	7.7	3.31 (1.26)
History	23.7	23.7	30.5	11.9	10.2	3.39 (1.26)
Geography	8.5	32.4	23.9	21.1	14.1	3.00 (1.21)
Civic Education	25.6	28.2	20.5	17.9	7.7	3.46 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	9.6	25.0	48.1	15.4	1.9	3.25 (0.91)
Physics	1.8	23.2	35.7	25.0	14.3	2.73 (1.04)
Biology	16.3	28.6	38.8	14.3	2.0	3.43 (1.00)
Human Culture	19.4	16.1	22.6	25.8	16.1	2.97 (1.38)

Item IIE 10c: To what degree does the teacher's manual effectively communicate the subject matter itself?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.5	28.2	30.8	14.1	6.4	3.42 (1.16)
Arabic Language	15.3	28.8	36.9	9.0	9.9	3.31 (1.14)
English Language	16.5	48.5	26.8	6.2	2.1	3.71 (0.89)
Mathematics	12.2	20.4	26.5	23.5	17.3	2.87 (1.27)
Specialized Subject Matters in The Arts						
General Science	23.1	7.7	57.7	3.8	7.7	3.35 (1.13)
History	31.0	22.4	19.0	15.5	12.1	3.45 (1.39)
Geography	15.5	31.0	25.4	12.7	15.5	3.18 (1.29)
Civic Education	28.2	30.8	17.9	12.8	10.3	3.54 (1.32)
Specialized Subject Matters in The Sciences						
Chemistry	9.6	34.6	34.6	21.2	0.0	3.33 (0.92)
Physics	1.8	26.8	30.4	26.8	14.3	2.75 (1.07)
Biology	16.7	31.3	39.6	12.5	0.0	3.52 (0.92)
Human Culture	15.6	21.9	25.0	15.6	21.9	2.94 (1.39)

Item IIE 11a: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of listening?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	24.4	24.4	28.2	19.2	3.8	3.46 (1.17)
Arabic Language	19.1	30.9	24.5	18.2	7.3	3.36 (1.19)
English Language	8.1	52.5	30.3	9.1	0.0	3.60 (0.77)
Mathematics	3.1	28.6	23.5	26.5	18.4	2.71 (1.16)
Specialized Subject Matters in The Arts						
General Science	11.5	26.9	30.8	26.9	3.8	3.15 (1.08)
History	19.7	37.7	19.7	13.1	9.8	3.44 (1.23)
Geography	16.4	24.7	24.7	17.8	16.4	3.07 (1.33)
Civic Education	30.8	30.8	20.5	12.8	5.1	3.69 (1.20)
Specialized Subject Matters in The Sciences						
Chemistry	20.8	24.5	34.0	13.2	7.5	3.38 (1.18)
Physics	9.1	20.0	32.7	27.3	10.9	2.89 (1.13)
Biology	12.2	22.4	53.1	12.2	0.0	3.35 (0.86)
Human Culture	15.6	25.0	25.0	18.8	15.6	3.06 (1.32)

Item IIE 11b: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of discussing?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	33.7	16.2	13.7	11.2	3.48 (1.31)
Arabic Language	25.5	32.7	25.5	11.8	4.5	3.63 (1.12)
English Language	4.0	43.4	37.4	10.1	5.1	3.31 (0.90)
Mathematics	13.7	26.5	25.5	20.6	13.7	3.06 (1.26)
Specialized Subject Matters in The Arts						
General Science	20.8	37.5	25.0	16.7	0.0	3.63 (1.01)
History	32.8	27.9	14.8	18.0	6.6	3.62 (1.29)
Geography	20.8	36.1	18.1	12.5	12.5	3.40 (1.30)
Civic Education	38.5	28.2	23.1	2.6	7.7	3.87 (1.20)
Specialized Subject Matters in The Sciences						
Chemistry	11.3	37.7	34.0	5.7	11.3	3.32 (1.12)
Physics	5.5	20.0	45.5	14.5	14.5	2.87 (1.07)
Biology	10.2	40.8	40.8	8.2	0.0	3.53 (0.79)
Human Culture	25.0	28.1	21.9	12.5	12.5	3.41 (1.34)

Item IIE 11c: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of defining and explaining key terms and concepts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	21.3	25.3	28.0	21.3	4.0	3.39 (1.16)
Arabic Language	20.7	28.8	34.2	9.0	7.2	3.47 (1.14)
English Language	7.0	29.0	47.0	17.0	0.0	3.26 (0.82)
Mathematics	14.0	18.0	38.0	15.0	15.0	3.01 (1.23)
Specialized Subject Matters in The Arts						
General Science	20.8	8.3	41.7	29.2	0.0	3.21 (1.10)
History	18.3	38.3	20.0	13.3	10.0	3.42 (1.23)
Geography	18.1	23.6	26.4	16.7	15.3	3.13 (1.32)
Civic Education	33.3	30.8	15.4	15.4	5.1	3.72 (1.23)
Specialized Subject Matters in The Sciences						
Chemistry	19.6	31.4	33.3	11.8	3.9	3.51 (1.07)
Physics	9.1	27.3	29.1	20.0	14.5	2.96 (1.20)
Biology	10.4	41.7	45.8	2.1	0.0	3.60 (0.71)
Human Culture	16.1	19.4	29.0	19.4	16.1	3.00 (1.32)

Item IIE 11d: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of contrasting, comparing?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	20.8	23.4	36.4	14.3	5.2	3.40 (1.13)
Arabic Language	16.5	28.4	37.6	11.9	5.5	3.39 (1.07)
English Language	2.1	27.8	54.6	11.3	4.1	3.12 (0.79)
Mathematics	8.9	21.8	27.7	27.7	13.9	2.84 (1.18)
Specialized Subject Matters in The Arts						
General Science	16.0	24.0	32.0	20.0	8.0	3.20 (1.19)
History	25.4	30.5	18.6	16.9	8.5	3.48 (1.28)
Geography	15.3	30.6	18.1	13.9	22.2	3.03 (1.40)
Civic Education	28.2	33.3	17.9	10.3	10.3	3.59 (1.29)
Specialized Subject Matters in The Sciences						
Chemistry	15.4	26.9	40.4	13.5	3.8	3.37 (1.03)
Physics	7.3	12.7	40.0	27.3	12.7	2.75 (1.08)
Biology	10.4	31.3	52.1	4.2	2.1	3.44 (0.82)
Human Culture	15.6	25.0	21.9	21.9	15.6	3.03 (1.33)

Item IIE 11e: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of recognizing various methods to solve problems?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	22.7	25.3	29.3	16.0	6.7	3.41 (1.20)
Arabic Language	26.6	22.9	28.4	12.8	9.2	3.45 (1.27)
English Language	1.0	19.6	43.3	26.8	9.3	2.76 (0.91)
Mathematics	10.6	24.0	26.0	21.2	18.3	2.88 (1.27)
Specialized Subject Matters in The Arts						
General Science	24.0	16.0	28.0	20.0	12.0	3.20 (1.35)
History	27.9	24.6	21.3	19.7	6.6	3.48 (1.27)
Geography	12.3	20.5	28.8	19.2	19.2	2.88 (1.29)
Civic Education	25.6	35.9	15.4	10.3	12.8	3.51 (1.34)
Specialized Subject Matters in The Sciences						
Chemistry	17.3	19.2	32.7	21.2	9.6	3.14 (1.22)
Physics	7.3	9.1	27.3	36.4	20.0	2.47 (1.14)
Biology	12.5	27.1	45.8	6.3	8.3	3.29 (1.05)
Human Culture	18.8	18.8	25.0	18.8	18.8	3.00 (1.39)

Part II Section E
Teacher Manual
(Supervisor)

Item IIE 1a: To what extent does the teacher's manual offer adequate evaluation procedures of assessing factual recall?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	50.0	41.7	1.67 (0.65)
Arabic Language	18.8	50.0	18.8	12.5	0.0	3.75 (0.93)
English Language	5.6	44.4	33.3	16.7	0.0	3.39 (0.85)
Mathematics	0.0	66.7	33.3	0.0	0.0	3.67 (0.50)
Specialized Subject Matters in The Arts						
General Science	33.3	50.0	16.7	0.0	0.0	4.17 (0.75)
History	12.5	37.5	25.0	25.0	0.0	3.38 (1.06)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	80.0	20.0	0.0	0.0	3.80 (0.45)
Physics	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIE 1b: To what extent does the teacher's manual offer adequate evaluation procedures of assessing comprehension?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	41.7	33.3	1.92 (0.23)
Arabic Language	18.8	50.0	31.3	0.0	0.0	3.88 (0.72)
English Language	11.1	66.7	16.7	5.6	0.0	3.83 (0.71)
Mathematics	0.0	44.4	55.6	0.0	0.0	3.44 (0.53)
Specialized Subject Matters in The Arts						
General Science	16.7	50.0	33.3	0.0	0.0	3.83 (0.75)
History	12.5	25.0	37.5	25.0	0.0	3.25 (1.04)
Geography	14.3	14.3	71.4	0.0	0.0	3.43 (0.79)
Civic Education	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
Physics	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 1c: To what extent does the teacher's manual offer adequate evaluation procedures of assessing ability to analyze?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	33.3	25.0	33.3	2.17 (1.03)
Arabic Language	25.0	31.3	31.3	12.5	0.0	3.69 (1.01)
English Language	11.1	5.6	55.6	27.8	0.0	3.00 (0.91)
Mathematics	0.0	33.3	66.7	0.0	0.0	3.33 (0.50)
Specialized Subject Matters in The Arts						
General Science	16.7	33.3	50.0	0.0	0.0	3.67 (0.82)
History	12.5	12.5	25.0	50.0	0.0	2.88 (1.13)
Geography	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
Civic Education	0.0	0.0	16.7	83.3	0.0	2.17 (0.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	60.0	20.0	20.0	0.0	3.40 (0.89)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIE 1d: To what extent does the teacher's manual offer adequate evaluation procedures of assessing ability to apply?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	16.7	33.3	33.3	2.17 (1.12)
Arabic Language	25.0	37.5	18.8	12.5	6.3	3.63 (1.20)
English Language	11.1	27.8	22.2	38.9	0.0	3.11 (1.08)
Mathematics	0.0	22.2	77.8	0.0	0.0	3.22 (0.44)
Specialized Subject Matters in The Arts						
General Science	33.3	16.7	33.3	16.7	0.0	3.67 (1.21)
History	12.5	12.5	37.5	37.5	0.0	3.00 (1.07)
Geography	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
Civic Education	0.0	16.7	0.0	83.3	0.0	2.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
Physics	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 1e: To what extent does the teacher's manual offer adequate evaluation procedures of assessing problem-solving ability?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	0.0	41.7	16.7	25.0	2.67 (1.37)
Arabic Language	18.8	31.3	31.3	12.5	6.3	3.44 (1.15)
English Language	11.1	16.7	33.3	27.8	11.1	2.89 (1.18)
Mathematics	0.0	11.1	44.4	44.4	0.0	2.67 (0.71)
Specialized Subject Matters in The Arts						
General Science	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
History	12.5	62.5	25.0	0.0	0.0	3.00 (0.93)
Geography	0.0	14.3	71.4	0.0	14.3	2.86 (0.90)
Civic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIE 2a: To what extent is the content of the teacher's manual presented clearly?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	16.7	41.7	41.7	1.75 (0.75)
Arabic Language	37.5	31.3	25.0	6.3	0.0	4.00 (0.97)
English Language	16.7	61.1	16.7	0.0	5.6	3.83 (0.92)
Mathematics	11.1	22.2	55.6	11.1	0.0	3.33 (0.87)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	37.5	12.5	25.0	12.5	12.5	3.50 (1.51)
Geography	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
Civic Education	16.7	16.7	50.0	16.7	0.0	3.33 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 2b: To what extent is the content of the teacher's manual recent and timely?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	41.7	41.7	8.3	2.50 (0.80)
Arabic Language	31.3	37.5	18.8	12.5	0.0	3.88 (1.03)
English Language	11.1	38.9	38.9	5.6	5.6	3.44 (0.98)
Mathematics	0.0	33.3	44.4	22.2	0.0	3.11 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	80.0	0.0	0.0	3.20 (0.45)
History	25.0	12.5	25.0	25.0	12.5	3.13 (1.46)
Geography	0.0	14.3	57.1	28.6	0.0	2.86 (0.69)
Civic Education	0.0	16.7	16.7	66.7	0.0	2.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIE 3a: To what degree are the ideas, suggestions and activities presented in the teacher's manual useful and relevant?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	33.3	41.7	25.0	2.08 (0.79)
Arabic Language	37.5	31.3	18.8	12.5	0.0	3.94 (1.06)
English Language	22.2	38.9	33.3	5.6	0.0	3.78 (0.88)
Mathematics	0.0	44.4	44.4	11.1	0.0	3.33 (0.71)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	37.5	25.0	12.5	25.0	0.0	3.75 (1.28)
Geography	0.0	57.1	14.3	28.6	0.0	3.29 (0.95)
Civic Education	0.0	33.3	16.7	50.0	0.0	2.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 3b: To what degree are the ideas suggestions and activities presented in the teacher's manual practical to implement?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	33.3	41.7	25.0	2.08 (0.79)
Arabic Language	31.3	31.3	25.0	12.5	0.0	3.81 (1.05)
English Language	11.1	44.4	38.9	5.6	0.0	3.61 (0.78)
Mathematics	0.0	33.3	44.4	22.2	0.0	3.11 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
History	25.0	12.5	37.5	25.0	0.0	3.38 (1.19)
Geography	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
Civic Education	0.0	16.7	33.3	50.0	0.0	2.67 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 3c: To what degree are the ideas suggestions and activities presented in the teacher's manual interesting and enjoyed by the students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	16.7	50.0	16.7	2.33 (0.99)
Arabic Language	31.3	18.8	43.8	6.3	0.0	3.75 (1.00)
English Language	11.1	33.3	44.4	11.1	0.0	3.44 (0.86)
Mathematics	0.0	11.1	55.6	22.2	11.1	2.67 (0.87)
Specialized Subject Matters in The Arts						
General Science	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
History	37.5	25.0	37.5	0.0	0.0	3.38 (1.41)
Geography	0.0	28.6	28.6	28.6	14.3	2.71 (1.11)
Civic Education	0.0	0.0	33.3	50.0	16.7	2.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	50.0	25.0	25.0	0.0	3.25 (0.96)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIE 3d: To what degree are the ideas suggestions and activities presented in the teacher's manual fully involving the students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	25.0	50.0	8.3	2.50 (0.91)
Arabic Language	25.0	31.3	31.3	12.5	0.0	3.69 (1.01)
English Language	5.6	33.3	44.4	11.1	5.6	3.22 (0.94)
Mathematics	0.0	33.3	44.4	22.2	0.0	3.11 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
History	25.0	12.5	37.5	12.5	12.5	3.25 (1.39)
Geography	0.0	28.6	28.6	28.6	14.3	2.71 (1.11)
Civic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIE 3e(i): To what degree are the ideas suggestions and activities presented in the teacher's manual suitable for the learning capabilities of below average students

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	25.0	25.0	41.7	8.3	2.67 (0.99)
Arabic Language	12.5	25.0	37.5	25.0	0.0	3.25 (1.00)
English Language	0.0	22.2	38.9	22.2	16.7	2.67 (1.03)
Mathematics	0.0	0.0	55.6	44.4	0.0	2.56 (0.53)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
History	12.5	12.5	62.5	12.5	0.0	3.25 (0.89)
Geography	0.0	14.3	57.1	28.6	0.0	2.86 (0.69)
Civic Education	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	40.0	40.0	20.0	0.0	3.20 (0.84)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	50.0	25.0	25.0	0.0	3.25 (0.96)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIE 3e(ii): To what degree are the ideas suggestions and activities presented in the teacher's manual suitable for the learning capabilities of average students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	58.3	33.3	8.3	2.50 (0.67)
Arabic Language	6.3	56.3	18.8	18.8	0.0	3.50 (0.89)
English Language	11.1	44.4	38.9	0.0	5.6	3.56 (0.92)
Mathematics	0.0	22.2	66.7	11.1	0.0	3.11 (0.60)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	25.0	12.5	37.5	25.0	0.0	3.38 (1.19)
Geography	0.0	14.3	85.7	0.0	0.0	3.14 (0.38)
Civic Education	0.0	0.0	83.3	16.7	0.0	2.83 (0.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	20.0	80.0	0.0	0.0	3.20 (0.45)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIE 3e(iii): To what degree are the ideas suggestions and activities presented in the teacher's manual suitable for the learning capabilities of superior students?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	16.7	41.7	25.0	2.25 (1.06)
Arabic Language	37.5	25.0	25.0	6.3	6.3	3.81 (1.22)
English Language	22.2	27.8	38.9	11.1	0.0	3.61 (0.98)
Mathematics	22.2	33.3	33.3	11.1	0.0	3.67 (1.00)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	20.0	20.0	0.0	3.40 (0.89)
History	37.5	25.0	25.0	0.0	12.5	3.75 (1.39)
Geography	0.0	57.1	42.9	0.0	0.0	3.57 (0.54)
Civic Education	0.0	33.3	16.7	50.0	0.0	2.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIE 4a: In the teacher's manual, to what degree are subject-matter topics and activities presented in a coherent, step-by-step manner?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	18.2	45.5	36.4	1.82 (0.75)
Arabic Language	12.5	62.5	18.8	6.3	0.0	3.81 (0.75)
English Language	11.1	66.7	16.7	5.6	0.0	3.83 (0.71)
Mathematics	0.0	33.3	55.6	11.1	0.0	3.22 (0.67)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	25.0	25.0	25.0	25.0	0.0	3.50 (1.20)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	16.7	16.7	50.0	16.7	0.0	3.33 (1.03)
Specialized Subject Matters in the Sciences						
Chemistry	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 4b: In the teacher's manual, to what degree are instructional objectives stated?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	9.1	18.2	45.5	27.3	2.09 (0.94)
Arabic Language	25.0	56.3	12.5	6.3	0.0	4.00 (0.82)
English Language	5.6	66.7	22.2	5.6	0.0	3.72 (0.67)
Mathematics	0.0	55.6	33.3	0.0	11.1	3.33 (1.00)
Specialized Subject Matters in The Arts						
General Science	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
History	25.0	12.5	50.0	12.5	0.0	3.50 (1.07)
Geography	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
Civic Education	16.7	16.7	33.3	33.3	0.0	3.17 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	50.0	25.0	25.0	0.0	0.0	4.25 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 4c(i): If unstated in the teacher's manual, to what degree are instructional objectives obvious to the teacher?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	9.1	18.2	54.5	18.2	2.18 (0.87)
Arabic Language	25.0	50.0	6.3	12.5	6.3	3.75 (1.18)
English Language	26.7	46.7	20.0	6.7	0.0	3.93 (0.88)
Mathematics	11.1	66.7	11.1	11.1	0.0	3.78 (0.83)
Specialized Subject Matters in The Arts						
General Science	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
History	25.0	37.5	37.5	0.0	0.0	3.88 (0.84)
Geography	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
Civic Education	16.7	16.7	50.0	16.7	0.0	3.33 (1.03)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	50.0	16.7	16.7	0.0	3.67 (1.03)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 4c(ii): If unstated in the teacher's manual, to what degree are instructional objectives obvious to both the teacher and the student?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	50.0	41.7	8.3	2.42 (0.67)
Arabic Language	6.7	20.0	66.7	0.0	6.7	3.20 (0.86)
English Language	0.0	26.7	33.3	33.3	6.7	2.80 (0.94)
Mathematics	0.0	33.3	44.4	22.2	0.0	3.11 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	60.0	20.0	0.0	3.00 (0.71)
History	12.5	25.0	62.5	0.0	0.0	3.50 (0.76)
Geography	14.3	28.6	57.1	0.0	0.0	3.57 (0.79)
Civic Education	16.7	0.0	83.3	0.0	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIE 4d: In the teacher's manual, to what degree are instructional objectives related to the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	16.7	41.7	41.7	1.75 (0.75)
Arabic Language	18.8	50.0	25.0	6.3	0.0	3.81 (0.83)
English Language	18.8	31.3	43.8	6.3	0.0	3.63 (0.89)
Mathematics	0.0	55.6	44.4	0.0	0.0	3.56 (0.53)
Specialized Subject Matters in The Arts						
General Science	0.0	80.0	20.0	0.0	0.0	3.80 (0.45)
History	12.5	37.5	50.0	0.0	0.0	3.63 (0.74)
Geography	14.3	57.1	14.3	14.3	0.0	3.71 (0.95)
Civic Education	16.7	33.3	33.3	16.7	0.0	3.50 (1.05)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	83.3	0.0	0.0	0.0	4.17 (0.41)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	50.0	50.0	0.0	0.0	0.0	4.50 (0.58)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIE 4e: In the teacher's manual, to what degree are objectives and procedures consistent?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	41.7	33.3	1.92 (0.79)
Arabic Language	20.0	46.7	26.7	6.7	0.0	3.80 (0.86)
English Language	23.5	23.5	41.2	11.8	0.0	3.59 (1.00)
Mathematics	0.0	44.4	33.3	22.2	0.0	3.22 (0.83)
Specialized Subject Matters in The Arts						
General Science	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
History	12.5	25.0	50.0	12.5	0.0	3.38 (0.92)
Geography	14.3	42.9	42.9	0.0	0.0	3.71 (0.76)
Civic Education	16.7	16.7	66.7	0.0	0.0	3.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	66.7	0.0	0.0	33.3	3.00 (1.73)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 4f(i): In the teacher's manual to what degree are major learning outcomes cognitive in nature?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	0.0	66.7	33.3	1.67 (0.49)
Arabic Language	18.8	56.3	18.8	6.3	0.0	3.88 (0.81)
English Language	0.0	44.4	44.4	11.1	0.0	3.33 (0.69)
Mathematics	0.0	55.6	33.3	11.1	0.0	3.44 (0.73)
Specialized Subject Matters in The Arts						
General Science	20.0	40.0	40.0	0.0	0.0	3.80 (0.84)
History	50.0	25.0	25.0	0.0	0.0	4.25 (0.89)
Geography	14.3	57.1	28.6	0.0	0.0	3.86 (0.69)
Civic Education	33.3	50.0	0.0	16.7	0.0	4.00 (1.10)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIE 4f(ii): In the teacher's manual to what degree are major learning outcomes affective in nature?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	8.3	33.3	41.7	8.3	2.67 (1.07)
Arabic Language	18.8	62.5	12.5	6.3	0.0	3.94 (0.77)
English Language	5.9	17.6	35.3	41.2	0.0	2.88 (0.93)
Mathematics	0.0	22.2	44.4	33.3	0.0	2.89 (0.78)
Specialized Subject Matters in The Arts						
General Science	0.0	75.0	0.0	25.0	0.0	3.50 (1.00)
History	0.0	25.0	50.0	12.5	12.5	2.88 (0.99)
Geography	0.0	28.6	57.1	0.0	14.3	3.00 (1.00)
Civic Education	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	0.0	25.0	50.0	25.0	0.0	3.00 (0.82)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 4f(iii): In the teacher's manual to what degree are major learning outcomes psychomotor in nature?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	25.0	25.0	33.3	16.7	2.58 (1.08)
Arabic Language	18.8	56.3	18.8	6.3	0.0	3.88 (0.81)
English Language	0.0	29.4	41.2	17.6	11.8	2.88 (0.99)
Mathematics	0.0	22.2	44.4	22.2	11.1	2.78 (0.97)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	40.0	20.0	0.0	3.20 (0.84)
History	0.0	25.0	37.5	25.0	12.5	2.75 (1.04)
Geography	0.0	14.3	57.1	14.3	14.3	2.71 (0.95)
Civic Education	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIE 4g: In the teacher's manual to what degree are suggestions given for a variety of activities and ideas for classroom use?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	33.3	33.3	25.0	2.25 (0.97)
Arabic Language	6.3	75.0	12.5	6.3	0.0	3.81 (0.66)
English Language	11.1	44.4	38.9	5.6	0.0	3.61 (0.78)
Mathematics	0.0	11.1	66.7	11.1	11.1	2.78 (0.83)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
History	12.5	50.0	37.5	0.0	0.0	3.75 (0.71)
Geography	16.7	33.3	16.7	16.7	16.7	3.17 (1.47)
Civic Education	16.7	16.7	16.7	50.0	0.0	3.00 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	50.0	0.0	0.0	3.50 (0.55)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIE 5: To what extent are special skills or training required before the teacher can use the teacher's manual?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	16.7	16.7	50.0	16.7	2.33 (0.99)
Arabic Language	12.5	56.3	31.3	0.0	0.0	3.81 (0.66)
English Language	11.1	33.3	16.7	33.3	5.6	3.11 (1.18)
Mathematics	0.0	50.0	25.0	12.5	12.5	3.13 (1.13)
Specialized Subject Matters in The Arts						
General Science	0.0	50.0	25.0	0.0	25.0	3.00 (1.41)
History	37.5	37.5	25.0	0.0	0.0	4.13 (0.84)
Geography	0.0	57.1	42.9	0.0	0.0	3.57 (0.54)
Civic Education	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	50.0	33.3	16.7	0.0	3.33 (0.82)
Physics	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIE 6a: In the teacher's manual, to what degree do you find that the presentation of subject matter is not orderly?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.7	25.0	8.3	41.7	8.3	3.00 (1.35)
Arabic Language	6.3	25.0	37.5	18.8	12.5	2.94 (1.12)
English Language	5.6	11.1	38.9	11.1	33.3	2.44 (1.25)
Mathematics	0.0	33.3	33.3	11.1	22.2	2.78 (1.20)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	20.0	60.0	0.0	2.60 (0.89)
History	14.3	14.3	42.9	0.0	28.6	2.86 (1.46)
Geography	0.0	28.6	28.6	28.6	14.3	2.71 (1.11)
Civic Education	0.0	0.0	33.3	50.0	16.7	2.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	16.7	16.7	33.3	2.50 (1.38)
Physics	33.3	0.0	33.3	33.3	0.0	3.33 (1.53)
Biology	0.0	25.0	25.0	0.0	50.0	2.25 (1.50)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

Item IIE 6b: To what degree do you find that the teacher's manual is too conforming for the teacher?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	25.0	0.0	41.7	25.0	8.3	3.08 (1.31)
Arabic Language	18.8	18.8	25.0	31.3	6.3	3.13 (1.26)
English Language	16.7	27.8	33.3	5.6	16.7	3.22 (1.31)
Mathematics	12.5	25.0	25.0	12.5	25.0	2.88 (1.46)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	40.0	40.0	0.0	2.80 (0.84)
History	14.3	14.3	28.6	0.0	42.9	2.57 (1.62)
Geography	14.3	28.6	42.9	0.0	14.3	3.29 (1.25)
Civic Education	16.7	16.7	16.7	50.0	0.0	3.00 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	16.7	50.0	33.3	1.83 (0.75)
Physics	33.3	33.3	0.0	33.3	0.0	3.67 (1.53)
Biology	25.0	0.0	0.0	25.0	50.0	2.25 (1.89)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 6c: To what degree do you find that the teacher's manual is too vague and lacks direction for the teacher?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	25.0	25.0	33.3	16.7	0.0	3.58 (1.08)
Arabic Language	6.3	43.8	18.8	18.8	12.5	3.13 (1.20)
English Language	0.0	11.1	22.2	11.1	55.6	1.89 (1.13)
Mathematics	0.0	22.2	44.4	11.1	22.2	2.67 (1.12)
Specialized Subject Matters in The Arts						
General Science	0.0	0.0	80.0	20.0	0.0	2.80 (0.45)
History	25.0	12.5	37.5	0.0	25.0	3.13 (1.55)
Geography	14.3	28.6	42.9	14.3	0.0	3.43 (0.98)
Civic Education	16.7	0.0	33.3	33.3	16.7	2.67 (1.37)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	25.0	0.0	25.0	25.0	25.0	2.75 (1.71)
Human Culture	0.0	0.0	66.7	33.3	0.0	2.67 (0.58)

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Item IIE 6d: To what degree do you find that the teacher's manual does not clearly define the expected student outcomes?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	25.0	33.3	33.3	8.3	0.0	3.75 (0.97)
Arabic Language	6.3	12.5	56.3	18.8	6.3	2.94 (0.93)
English Language	11.1	11.1	16.7	27.8	33.3	2.39 (1.38)
Mathematics	0.0	33.3	44.4	11.1	11.1	3.00 (1.00)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	80.0	0.0	0.0	3.20 (0.45)
History	25.0	25.0	25.0	12.5	12.5	3.38 (1.41)
Geography	14.3	28.6	42.9	14.3	0.0	3.43 (0.98)
Civic Education	33.3	0.0	16.7	50.0	0.0	3.17 (1.47)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Physics	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Biology	25.0	0.0	25.0	25.0	25.0	2.75 (1.71)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Item IIE 7: To what extent are a variety of evaluation methods, besides paper and pencil tests suggested?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	16.7	8.3	50.0	25.0	0.0	3.17 (1.03)
Arabic Language	12.5	37.5	37.5	12.5	0.0	3.50 (0.89)
English Language	0.0	16.7	55.6	27.8	0.0	2.89 (0.68)
Mathematics	0.0	12.5	50.0	25.0	12.5	2.63 (0.92)
Specialized Subject Matters in The Arts						
General Science	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
History	0.0	12.5	50.0	0.0	37.5	2.38 (1.19)
Geography	0.0	28.6	42.9	14.3	14.3	2.86 (1.07)
Civic Education	0.0	33.3	16.7	50.0	0.0	2.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	0.0	66.7	16.7	0.0	3.17 (0.98)
Physics	0.0	33.3	0.0	66.7	0.0	2.67 (1.16)
Biology	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 8a: To what extent are the teaching materials and equipment suggested by the teacher's manual available?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	16.7	41.7	16.7	16.7	2.83 (1.19)
Arabic Language	6.3	50.0	31.3	12.5	0.0	3.50 (0.82)
English Language	33.3	44.4	22.2	0.0	0.0	4.11 (0.76)
Mathematics	0.0	12.5	62.5	12.5	12.5	2.75 (0.89)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	40.0	20.0	0.0	3.20 (0.84)
History	0.0	12.5	75.0	0.0	12.5	2.88 (0.84)
Geography	0.0	14.3	71.4	14.3	0.0	3.00 (0.58)
Civic Education	0.0	16.7	83.3	0.0	0.0	3.17 (0.41)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Physics	0.0	33.3	0.0	33.3	33.3	2.33 (1.53)
Biology	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 8b(i): To what extent are the teaching materials and equipment suggested by the teacher's manual easy to use by the teacher?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	33.3	33.3	25.0	2.33 (1.16)
Arabic Language	18.8	43.8	31.3	6.3	0.0	3.75 (0.86)
English Language	44.4	38.9	16.7	0.0	0.0	4.28 (0.75)
Mathematics	0.0	37.5	50.0	0.0	12.5	3.13 (0.99)
Specialized Subject Matters in The Arts						
General Science	20.0	60.0	0.0	20.0	0.0	3.80 (1.10)
History	0.0	37.5	50.0	12.5	0.0	3.25 (0.71)
Geography	0.0	42.9	42.9	14.3	0.0	3.29 (0.76)
Civic Education	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	83.3	0.0	16.7	0.0	3.67 (0.82)
Physics	33.3	33.3	0.0	0.0	33.3	3.33 (2.08)
Biology	25.0	75.0	0.0	0.0	0.0	4.25 (0.50)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

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Item IIE 8b(i): To what extent are the teaching materials and equipment suggested by the teacher's manual easy to use by the students?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	0.0	50.0	33.3	8.3	2.67 (0.99)
Arabic Language	18.8	25.0	37.5	18.8	0.0	3.44 (1.03)
English Language	27.8	38.9	22.2	5.6	5.6	3.78 (1.11)
Mathematics	0.0	11.1	66.7	0.0	22.2	2.67 (1.00)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	60.0	0.0	20.0	2.80 (1.10)
History	0.0	0.0	87.5	12.5	0.0	2.88 (0.35)
Geography	0.0	0.0	85.7	14.3	0.0	2.86 (0.38)
Civic Education	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	25.0	0.0	50.0	25.0	0.0	3.25 (1.26)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Item IIE 9 a: To what degree is the teacher's manual helpful in promoting the teacher's understanding of the concept in order to be able to present it in class?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	33.3	33.3	33.3	2.00 (0.85)
Arabic Language	25.0	43.8	25.0	6.3	0.0	3.88 (0.89)
English Language	23.5	52.9	11.8	5.9	5.9	3.82 (1.07)
Mathematics	0.0	50.0	37.5	0.0	12.5	3.25 (1.04)
Specialized Subject Matters in The Arts						
General Science	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
History	25.0	25.0	37.5	12.5	0.0	3.63 (1.06)
Geography	0.0	57.1	42.9	0.0	0.0	3.57 (0.54)
Civic Education	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	16.7	66.7	16.7	0.0	0.0	4.00 (0.63)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	66.7	33.3	0.0	0.0	0.0	4.67 (0.58)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 9 b: To what degree is the teacher's manual helpful in suggesting new ideas to facilitate the students' understanding of the concepts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	50.0	33.3	16.7	2.33 (0.78)
Arabic Language	25.0	37.5	25.0	12.5	0.0	3.75 (1.00)
English Language	17.6	29.4	41.2	5.9	5.9	3.47 (1.07)
Mathematics	0.0	44.4	33.3	11.1	11.1	3.11 (1.05)
Specialized Subject Matters in The Arts						
General Science	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
History	37.5	12.5	25.0	25.0	0.0	3.63 (1.30)
Geography	0.0	42.9	57.1	0.0	0.0	3.43 (0.54)
Civic Education	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIE 9 c: To what degree is the teacher's manual helpful in suggesting extra charts and figures to facilitate the concept acquisition?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	8.3	16.7	25.0	33.3	16.7	2.67 (1.23)
Arabic Language	26.7	20.0	33.3	20.0	0.0	3.53 (1.13)
English Language	5.9	17.6	58.8	5.9	11.8	3.00 (1.00)
Mathematics	0.0	33.3	22.2	22.2	22.2	2.67 (1.23)
Specialized Subject Matters in The Arts						
General Science	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
History	12.5	25.0	50.0	12.5	0.0	3.38 (0.92)
Geography	0.0	0.0	57.1	28.6	14.3	2.43 (0.79)
Civic Education	0.0	0.0	66.7	16.7	16.7	2.50 (0.84)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)
Biology	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Human Culture	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)

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Item IIE 9 d: To what degree is the teacher's manual helpful in giving more examples and non-examples of each concept?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	16.7	0.0	41.7	25.0	16.7	2.75 (1.29)
Arabic Language	18.8	37.5	31.3	12.5	0.0	3.63 (0.96)
English Language	0.0	29.4	47.1	11.8	11.8	2.94 (0.97)
Mathematics	0.0	33.3	33.3	22.2	11.1	2.89 (1.05)
Specialized Subject Matters in The Arts						
General Science	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)
History	12.5	12.5	62.5	0.0	12.5	3.13 (1.13)
Geography	0.0	0.0	85.7	14.3	0.0	2.86 (0.38)
Civic Education	0.0	0.0	66.7	33.3	0.0	2.67 (0.52)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
Human Culture	0.0	0.0	33.3	66.7	0.0	2.33 (0.58)

Item IIE 9 e: To what degree is the teacher's manual helpful in suggesting methods of presentation and ideas to relate the concepts to the everyday life activities of the students at this age?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	8.3	8.3	25.0	41.7	16.7	2.50 (1.17)
Arabic Language	25.0	31.3	25.0	12.5	6.3	3.56 (1.21)
English Language	5.9	23.5	47.1	23.5	0.0	3.12 (0.86)
Mathematics	0.0	0.0	66.7	22.2	11.1	2.56 (0.73)
Specialized Subject Matters in The Arts						
General Science	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
History	25.0	0.0	50.0	12.5	12.5	3.13 (1.36)
Geography	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
Civic Education	0.0	0.0	16.7	66.7	16.7	2.00 (0.63)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	0.0	33.3	33.3	33.3	2.00 (1.00)

Item IIE 9 f: To what degree is the teacher's manual helpful in providing the teacher with guidelines to design and select his own or the most relevant examples and non-examples of the concept to be taught?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	8.3	50.0	33.3	1.92 (0.90)
Arabic Language	33.3	20.0	40.0	0.0	6.7	3.73 (1.16)
English Language	5.6	22.2	38.9	27.8	5.6	2.94 (1.00)
Mathematics	0.0	25.0	50.0	12.5	12.5	2.88 (0.99)
Specialized Subject Matters in The Arts						
General Science	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)
History	37.5	12.5	12.5	12.5	25.0	3.25 (1.75)
Geography	28.6	28.6	14.3	28.6	0.0	3.57 (1.27)
Civic Education	33.3	0.0	33.3	16.7	16.7	3.17 (1.60)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	25.0	25.0	25.0	25.0	0.0	3.50 (1.29)
Human Culture	33.3	0.0	0.0	33.3	33.3	2.67 (2.08)

Item IIE 9 g: To what degree is the teacher's manual helpful in providing the teacher with ideas and examples to design assessment of the student's progress?

	Fully 5 %	Greatly 4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	0.0	25.0	33.3	41.7	1.83 (0.84)
Arabic Language	28.6	42.9	14.3	7.1	7.1	3.79 (1.19)
English Language	0.0	27.8	27.8	44.4	0.0	2.83 (0.86)
Mathematics	0.0	71.4	14.3	0.0	14.3	3.43 (1.13)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
History	25.0	25.0	12.5	12.5	25.0	3.13 (1.64)
Geography	14.3	42.9	14.3	28.6	0.0	3.43 (1.13)
Civic Education	16.7	16.7	16.7	33.3	16.7	2.83 (1.47)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	66.7	16.7	0.0	3.00 (0.63)
Physics	0.0	33.3	33.3	0.0	33.3	2.67 (1.53)
Biology	50.0	0.0	50.0	0.0	0.0	4.00 (1.41)
Human Culture	33.3	0.0	0.0	33.3	33.3	2.67 (2.08)

Item IIE 10 a: To what degree does the teacher's manual effectively communicate the instructional objectives?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	41.7	33.3	1.92 (0.79)
Arabic Language	40.0	40.0	13.3	6.7	0.0	4.13 (0.92)
English Language	11.1	50.0	27.8	5.6	5.6	3.56 (0.98)
Mathematics	0.0	33.3	44.4	11.1	11.1	3.00 (1.00)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	12.5	12.5	50.0	12.5	12.5	3.00 (1.20)
Geography	42.9	14.3	28.6	14.3	0.0	3.86 (1.22)
Civic Education	16.7	16.7	50.0	0.0	16.7	3.17 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	100.0	0.0	0.0	0.0	4.00 (0.00)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	0.0	50.0	50.0	0.0	0.0	3.50 (0.58)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 10 b: To what degree does the teacher's manual effectively communicate the background needed to understand the subject matter?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	8.3	33.3	33.3	25.0	2.25 (0.97)
Arabic Language	26.7	33.3	26.7	13.3	0.0	3.73 (1.03)
English Language	11.1	38.9	33.3	11.1	5.6	3.39 (1.04)
Mathematics	0.0	22.2	33.3	33.3	11.1	2.67 (1.00)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	12.5	25.0	25.0	12.5	25.0	2.88 (1.46)
Geography	14.3	28.6	28.6	14.3	14.3	3.14 (1.35)
Civic Education	0.0	16.7	16.7	33.3	33.3	2.17 (1.17)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Biology	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
Human Culture	0.0	33.3	33.3	33.3	0.0	3.00 (1.00)

Item IIE 10 c: To what degree does the teacher's manual effectively communicate the subject matter itself?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	50.0	25.0	2.00 (0.74)
Arabic Language	33.3	33.3	26.7	6.7	0.0	3.93 (0.96)
English Language	27.8	33.3	27.8	11.1	0.0	3.78 (1.00)
Mathematics	11.1	11.1	44.4	22.2	11.1	2.89 (1.17)
Specialized Subject Matters in The Arts						
General Science	0.0	40.0	60.0	0.0	0.0	3.40 (0.55)
History	12.5	25.0	25.0	12.5	25.0	2.88 (1.46)
Geography	0.0	42.9	28.6	14.3	14.3	3.00 (1.16)
Civic Education	0.0	0.0	33.3	16.7	50.0	1.83 (0.98)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	0.0	16.7	3.00 (1.10)
Physics	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Biology	25.0	50.0	25.0	0.0	0.0	4.00 (0.82)
Human Culture	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)

Item IIE 11 a: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of listening?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	50.0	41.7	8.3	2.42 (0.67)
Arabic Language	13.3	53.3	13.3	20.0	0.0	3.60 (0.99)
English Language	22.2	44.4	27.8	5.6	0.0	3.83 (0.86)
Mathematics	0.0	22.2	33.3	22.2	22.2	2.56 (1.13)
Specialized Subject Matters in The Arts						
General Science	0.0	60.0	40.0	0.0	0.0	3.60 (0.55)
History	12.5	25.0	25.0	37.5	0.0	3.13 (1.13)
Geography	14.3	28.6	28.6	14.3	14.3	3.14 (1.35)
Civic Education	16.7	16.7	16.7	50.0	0.0	3.00 (1.27)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	16.7	50.0	33.3	0.0	2.83 (0.75)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	0.0	0.0	0.0	100.0	0.0	2.00 (0.00)
Human Culture	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)

Item IIE 11 b: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of discussing?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	8.3	66.7	25.0	1.83 (0.58)
Arabic Language	33.3	40.0	20.0	6.7	0.0	4.00 (0.93)
English Language	22.2	33.3	27.8	5.6	11.1	3.50 (1.25)
Mathematics	11.1	22.2	33.3	22.2	11.1	3.00 (1.23)
Specialized Subject Matters in The Arts						
General Science	0.0	25.0	75.0	0.0	0.0	3.25 (0.50)
History	37.5	12.5	25.0	25.0	0.0	3.63 (1.30)
Geography	0.0	28.6	42.9	28.6	0.0	3.00 (0.82)
Civic Education	16.7	16.7	0.0	66.7	0.0	2.83 (1.33)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	50.0	16.7	0.0	3.17 (0.75)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	0.0	50.0	25.0	25.0	0.0	3.25 (0.96)
Human Culture	33.3	33.3	33.3	0.0	0.0	4.00 (1.00)

Item IIE 11 c: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of defining and explaining key terms and concepts?

	Fully	Greatly	Sometimes	Seldom	Rarely	Mean (sd)
	5 %	4 %	3 %	2 %	1 %	
Islamic Education	0.0	0.0	25.0	41.7	33.3	1.92 (0.79)
Arabic Language	13.3	73.3	6.7	0.0	6.7	3.87 (0.92)
English Language	11.1	33.3	27.8	27.8	0.0	3.28 (1.02)
Mathematics	0.0	22.2	55.6	0.0	22.2	2.78 (1.09)
Specialized Subject Matters in The Arts						
General Science	0.0	75.0	25.0	0.0	0.0	3.75 (0.50)
History	37.5	12.5	25.0	25.0	0.0	3.63 (1.30)
Geography	0.0	28.6	57.1	14.3	0.0	3.14 (0.69)
Civic Education	0.0	33.3	33.3	33.3	0.0	3.00 (0.89)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	33.3	66.7	0.0	0.0	3.33 (0.52)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	0.0	66.7	33.3	0.0	0.0	3.67 (0.58)

Item IIE 11 d: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of contrasting, comparing?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	41.7	41.7	8.3	2.50 (0.80)
Arabic Language	13.3	40.0	40.0	0.0	6.7	3.53 (0.99)
English Language	5.6	38.9	33.3	22.2	0.0	3.28 (0.90)
Mathematics	0.0	11.1	55.6	11.1	22.2	2.56 (1.01)
Specialized Subject Matters in The Arts						
General Science	0.0	33.3	66.7	0.0	0.0	3.33 (0.58)
History	12.5	25.0	25.0	25.0	12.5	3.00 (1.31)
Geography	0.0	0.0	42.9	42.9	14.3	2.29 (0.76)
Civic Education	16.7	0.0	16.7	50.0	16.7	2.50 (1.38)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	25.0	0.0	75.0	0.0	0.0	3.50 (1.00)
Human Culture	33.3	0.0	66.7	0.0	0.0	3.67 (1.16)

Item IIE 11 e: To what extent do the materials and suggestions in the teacher's manual encourage the development of the instructional process of recognizing various methods to solve problems?

	Fully Greatly 5 %	4 %	Sometimes 3 %	Seldom 2 %	Rarely 1 %	Mean (sd)
Islamic Education	0.0	8.3	25.0	41.7	25.0	2.17 (0.94)
Arabic Language	13.3	46.7	26.7	6.7	6.7	3.53 (1.06)
English Language	0.0	27.8	27.8	38.9	5.6	2.78 (0.94)
Mathematics	0.0	11.1	44.4	22.2	22.2	2.44 (1.01)
Specialized Subject Matters in The Arts						
General Science	0.0	20.0	80.0	0.0	0.0	3.20 (0.45)
History	12.5	12.5	37.5	25.0	12.5	2.88 (1.25)
Geography	0.0	14.3	28.6	28.6	28.6	2.29 (1.11)
Civic Education.	0.0	0.0	33.3	50.0	16.7	2.17 (0.75)
Specialized Subject Matters in The Sciences						
Chemistry	0.0	66.7	33.3	0.0	0.0	3.67 (0.52)
Physics	0.0	0.0	66.7	0.0	33.3	2.33 (1.16)
Biology	25.0	25.0	50.0	0.0	0.0	3.75 (0.96)
Human Culture	0.0	0.0	100.0	0.0	0.0	3.00 (0.00)

Student Arts

PART 1: GENERAL DATA

Item	Percent
1. Sex:	
male	58.1
female	41.9
2. Nationality:	
Omani	97.0
Non-Omani	2.6
3. Name of your school district:	
Muscat	17.0
Batinah	11.1
Roustaq	11.1
Dakhiliyah	11.1
Sharqiyah	11.1
Wousta	11.5
Dhahirah	5.2
Janoubiyah	10.7
Musandam	11.1

Student Arts

PART II

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
SECTION 1: CURRICULUM AND SUBJECT MATTERS						
A. General						
1. To what degree do you believe that subject-matters you are studying at the Secondary Level form an integrated and cohesive structure of information?	20.9	44.4	23.9	7.5	3.4	3.72 (0.99)
2. To what degree do you see subject-matters handle local environment in such a way that enable you to assess social needs and methods for achieving social objectives?	13.9	38.0	24.1	18.4	5.6	3.36 (1.11)
3. To what degree do subject-matters at the Secondary Level help you acquire the following basic skills:						
a. cognitive skills?	29.4	40.8	24.2	3.8	1.9	3.92 (0.92)
b. social skills?	20.0	36.5	25.0	15.8	2.7	3.55 (1.06)
c. psychomotor skills?	6.3	7.4	23.8	29.7	32.8	2.25 (1.17)
4. To what extent does the curriculum help you comprehend contemporary scientific and technological developments?	15.1	38.6	25.1	13.9	7.3	3.40 (1.12)
5. To what extent do your secondary studies help you discover, refine, and develop your talents:						
a. literary talents?	40.2	37.2	14.7	4.9	3.0	4.07 (1.01)
b. scientific talents?	3.6	20.2	30.8	32.4	13.0	2.69 (1.05)
6. To what degree do you believe the curriculum for Secondary Level achieves balance among concepts, skills, social aspects, attitudes and values?	14.6	35.6	33.3	12.3	4.2	3.44 (1.02)
7. To what degree do you see the way subject-matter is studied, helps and guides you to sound scientific - thinking style in solving-problems and in identifying basic processes such as induction, experimentation measurement, and deduction?	19.4	31.7	29.1	13.1	6.7	3.44 (1.14)
8. To what extent do your studies at Secondary Level contribute to your development of sound reading habits so that you would be able to continue researching topics you are interested in a variety of references?	26.2	33.3	21.7	13.5	5.2	3.62 (1.16)
9. To what extent does your study enable you to judge, discuss, and appreciate or reject what you read?	21.7	42.3	23.6	9.0	3.4	3.70 (1.02)
10. To what extent does your secondary study contribute to deepening your sense of self-respect, loyalty to country, and to all Arab homeland?	70.6	19.3	7.8	1.1	1.1	4.57 (0.78)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
11. To what extent does this level of study develop in you a positive attitude towards environmental protection and natural resources conservation?	41.8	36.6	14.6	5.2	1.9	4.11 (0.97)
12. To what extent do subject-matter materials contribute to developing cooperative spirit, enjoyment of group work, and respect for other options?	41.7	31.1	18.2	6.1	3.0	4.02 (1.06)
13. To what extent do subject-matter materials at the Secondary Level encourage participation in class and extra-class activities and develop some interests such as: artistic, literary, scientific, and technological?	10.1	30.3	30.3	18.7	10.5	3.11 (1.14)
14. To what degree do you feel that the standard of the subject-matter material is appropriate for the age level in each grade?	9.4	32.6	30.7	16.1	11.2	3.13 (1.14)
15. To what degree do you feel that you benefitted from what you studied in Grade 1 Secondary in the following subject-matters:						
a. Physics?	5.0	15.9	25.2	28.3	25.6	2.47 (1.18)
b. Chemistry?	7.1	15.7	27.6	26.0	23.6	2.57 (1.21)
c. Biology?	17.3	35.8	26.8	7.9	12.2	3.38 (1.22)
d. Mathematics?	16.0	24.7	25.1	17.1	17.1	3.05 (1.32)
B. Subject-Matters						
First: History						
16. Educators define "concept" as a classification and organization of experiences in an established form based on patterned relationships that connect those experiences and give them specified names. In light of this detailed defnition of "concept", to what extent does the History Curriculum for Grade 1 Secondary contribute to the illustration of the following concepts:						
a. Renaissance as one of the great events of contemporary periods?	38.1	41.0	13.1	5.6	2.2	4.07 (0.97)
b. Geographic Explorations?	28.8	38.2	24.0	7.1	1.9	3.85 (0.98)
c. Intellectual awakening?	27.2	36.4	24.1	9.2	3.1	3.76 (1.05)
d. Industrial Revolution?	27.5	35.5	22.6	10.9	3.4	3.73 (1.08)
e. Nationalistic enlightenment?	17.4	33.7	33.3	11.7	3.8	3.49 (1.03)
f. European conferences?	15.3	24.0	28.6	22.9	9.2	3.13 (1.20)
g. Unity and Federation?	23.3	29.8	21.7	17.8	7.4	3.44 (1.23)
h. martial laws?	13.9	20.1	36.3	21.6	8.1	3.10 (1.14)
i. international relationships and treaties?	20.2	31.9	26.5	15.2	6.2	3.45 (1.16)
j. international crises?	14.1	28.5	28.1	21.1	8.2	3.19 (1.16)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. Educators define "concept" as a classification and organization of experiences in an established form based on patterned relationships that connect those experiences and give them specified names (cont'd).						
In light of this detailed definition of "concept", to what extent does the History Curriculum for Grade 1 Secondary contribute to the illustration of the following concepts:						
k. Capitalism and Colonial competitiveness?	21.2	28.0	25.8	15.9	9.1	3.36 (1.24)
l. Allies and Axis?	16.8	29.8	26.7	16.8	9.9	3.27 (1.21)
m. League of Nations?	19.8	30.9	24.4	19.1	5.7	3.40 (1.17)
n. United Nations?	24.7	30.9	22.0	14.3	8.1	3.50 (1.23)
17. To what extent does the History curriculum for grade 2 Secondary Literary contribute to the illustration and realization of the following concepts:						
a. Civilization?	51.1	30.5	11.7	4.1	2.6	4.23 (0.99)
b. origin and characteristics of Islamic Civilization?	49.2	29.3	16.2	3.4	1.9	4.21 (0.96)
c. illustrations of Islamic Civilization?	38.8	38.8	14.1	6.5	1.9	4.06 (0.98)
d. effect of Islamic culture on European cultures?	39.7	33.1	18.3	6.2	2.7	4.01 (1.04)
e. Crusaders and Crusades?	29.9	29.9	25.0	9.8	5.3	3.69 (1.15)
f. Seljuks?	10.6	30.9	35.8	15.8	6.8	3.23 (1.06)
g. Mongols?	15.4	36.5	25.9	16.5	5.6	3.40 (1.11)
h. land beyond the river?	27.4	34.2	22.9	12.0	3.4	3.70 (1.10)
i. Bysantines?	13.5	21.7	36.0	22.1	6.7	3.13 (1.11)
j. Islamic peace?	28.9	31.6	22.2	12.4	4.9	3.67 (1.16)
k. class system in India?	20.5	25.5	29.7	15.2	9.1	3.33 (1.22)
l. Draphides and Aryons?	11.8	22.9	31.3	21.8	12.2	3.00 (1.19)
m. Islamic mini-states?	20.1	32.4	29.7	16.2	1.5	3.53 (1.04)
n. Memlouk sultans?	22.3	32.0	29.7	10.5	5.5	3.55 (1.11)
18. To what extent does the History Curriculum of Grade 3 Secondary (Literary) contribute to illustrating to following concepts:						
a. Arabian Gulf concept?	48.3	31.8	11.6	5.6	2.6	4.18 (1.02)
b. ancient near east?	24.7	41.6	19.1	10.9	3.7	3.73 (1.07)
c. Mesopotamia - land and culture?	23.1	34.8	25.4	13.3	3.4	3.61 (1.08)
d. Delmon culture and Mjan culture?	49.6	29.3	13.5	4.1	3.4	4.18 (1.04)
e. Helenic and Hellistic eras?	15.1	24.3	33.2	16.6	10.8	3.16 (1.19)
f. battles of Arabs?	27.1	34.7	18.7	14.9	4.6	3.65 (1.16)
g. navigation in the Arabian gulf through history?	30.8	34.6	21.1	9.4	4.1	3.79 (1.11)
h. European competition in the Arabian gulf?	26.7	35.3	27.1	7.8	3.1	3.75 (1.03)
i. Alya'ariba and the Busa'eeds?	47.5	29.0	15.4	6.2	1.9	4.14 (1.02)
j. era of Omani progress?	39.8	27.2	17.9	10.6	4.5	3.87 (1.18)
k. tales of Ibn Majid in the art of navigation?	23.7	26.7	24.2	15.7	9.7	3.39 (1.27)
l. religious sects?	17.0	25.5	32.5	14.0	11.0	3.24 (1.21)
m. the I'badiyah and its principles?	17.8	29.4	23.9	15.2	13.7	3.22 (1.29)
n. the Rustumians?	8.0	13.3	34.0	27.7	17.0	2.68 (1.15)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
19. Skill is described as an individual's easy, simple, and accurate conscious performance. Furthermore, skill can be seen as an initial muscular or cognitive performance. In light of this definition of skills, could you illustrate to what extent the History curriculum realizes the following skills:						
a. Critical thinking?	8.6	23.1	32.9	26.7	8.6	2.97 (1.09)
b. social sensitivity?	9.5	26.5	36.0	22.0	6.1	3.11 (1.05)
c. analysis and solution of problems?	11.4	25.1	26.2	24.7	12.5	2.98 (1.21)
d. identifying sources of information?	17.3	28.2	26.7	21.8	6.0	3.29 (1.16)
e. information gathering, organization, and evaluation?	13.0	25.7	31.0	16.9	13.4	3.08 (1.22)
f. comprehensive listening and reading, and library usage?	19.4	21.3	24.0	21.7	13.7	3.11 (1.32)
g. intelligent conversation and writing?	17.8	27.3	29.5	15.5	9.8	3.28 (1.21)
h. interpretation of historical and periodic maps?	11.4	19.3	25.8	27.3	16.3	2.82 (1.24)
i. interpretation of graphs, data, models, and drawings?	3.8	16.0	32.4	27.9	19.8	2.56 (1.09)
j. interpretation and analysis of current events?	9.9	26.2	29.3	23.6	11.0	3.00 (1.16)
k. use of time concepts?	8.0	22.4	30.0	25.1	14.4	2.84 (1.16)
l. participation in group activities?	13.0	19.5	29.9	22.6	14.9	2.93 (1.24)
m. interpretation of the present, perception of nature, and goals of change?	15.1	28.3	28.7	18.5	9.4	3.21 (1.19)
n. illustration of future direction?	17.9	29.3	26.2	16.0	10.6	3.28 (1.23)
o. development of attitude of loyalty to country?	39.0	31.1	14.8	10.2	4.9	3.89 (1.18)
p. development of scientific thinking and scientific skills?	8.0	23.0	36.8	21.1	11.1	2.96 (1.10)
q. development of research and report writing?	6.9	18.5	24.3	28.6	21.6	2.61 (1.21)
r. organization of field-trips and celebration of events?	16.5	16.5	20.4	19.2	27.3	2.76 (1.44)
Second: Geography						
20. Geography is crystallized in a group of basic concepts and relationships between man and society. To what degree do you feel you have comprehended those concepts and relationships so that you are able to discuss them and give an opinion about them:						
a. Characteristics of Omani environment and its natural, social, economic, and political constituents?	23.3	31.1	26.1	10.5	8.9	3.49 (1.21)
b. Characteristics of Gulf environment and its natural, social, economic, and political constituents?	14.3	32.8	24.7	21.6	6.6	3.27 (1.15)
c. Appreciation of efforts carried on by Omani, Gulf and Arabian and Muslim countries in order to solve their economic and social problems?	26.5	21.0	25.3	18.3	8.9	3.38 (1.29)
d. realization of Omani progress in social, economic, and political fields?	32.4	30.1	20.5	12.0	5.0	3.73 (1.18)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
20. Geography is crystallized in a group of basic concepts and relationships between man and society. To what degree do you feel you have comprehended those concepts and relationships so that you are able to discuss them and give an opinion about them: (cont'd)						
e. understanding of local community problems and developmental projects?	15.4	31.2	26.9	19.2	7.3	3.28 (1.16)
f. realization of interaction between man and environment?	20.8	31.7	23.2	16.6	7.7	3.41 (1.21)
g. identifying methods of exploitation and conservation of natural resources?	22.0	33.0	22.3	14.8	8.0	3.46 (1.21)
21. To what degree do you feel that you have achieved the following skills while studying geography:						
a. conducting geography related research?	1.5	14.2	33.6	24.3	26.5	2.40 (1.07)
b. writing research paper and reports and using reference?	2.7	11.5	24.5	31.0	30.3	2.25 (1.09)
c. following current events and acquisition of the ability to distinguish between valuable and invaluable information provided by mass media?	6.1	18.0	28.7	24.1	23.0	2.60 (1.20)
d. drawing of maps, statistical charts, graphs, models, and posters?	8.7	22.3	25.3	20.0	23.8	2.72 (1.28)
e. reading maps, data, graphs, charts and models?	8.8	21.1	27.2	24.5	18.4	2.77 (1.22)
f. usage of compass and maps to identify earthly forms and locating your position on the map?	5.7	11.4	22.0	24.2	36.7	2.25 (1.22)
Third: Civil Education and Human Culture						
22. To what extent did the Civil Education curriculum for Grade 1 Secondary contribute to illustrating the following concepts:						
a. culture and its relationship to society?	31.8	37.1	18.9	9.1	3.0	3.86 (1.06)
b. society in the Islamic context?	37.5	33.0	19.7	8.3	1.5	3.97 (1.02)
c. the family, norms, values, and development?	40.9	36.4	15.2	4.9	2.7	4.08 (1.00)
d. Omani values, tradition, and heritage?	47.7	29.0	13.7	6.9	2.7	4.12 (1.06)
e. relics, fortresses, and castles?	43.9	31.7	14.9	5.3	4.2	4.06 (1.09)
f. exhibitions, museums, and transcripts?	19.8	33.5	23.2	16.3	7.2	3.42 (1.19)
g. traditional professions?	23.6	35.4	22.4	13.3	5.3	3.59 (1.14)
h. population activities?	10.3	25.5	39.2	17.1	8.0	3.13 (1.07)
i. state activities?	19.1	34.4	27.1	13.4	6.1	3.47 (1.13)
j. social institutions?	12.2	28.6	34.7	17.9	6.5	3.22 (1.08)
k. oil, gas and development?	16.9	33.0	28.7	14.6	6.9	3.38 (1.13)
l. the Council for Development?	26.7	33.5	25.4	10.2	4.2	3.68 (1.10)
23. To what extent does the Unit "Arab Society" in the Civil Education Curriculum for Grade 2 Secondary (Literary) contribute toward illustrating the following concepts:						
a. concept of location and site?	29.7	38.4	21.7	7.6	2.7	3.85 (1.02)
b. concept of culture?	21.4	40.1	26.3	10.3	1.9	3.69 (0.98)
c. value system?	16.7	36.8	28.7	14.0	3.9	3.48 (1.05)

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
23. To what extent does the Unit "Arab Society" in the Civil Education Curriculum for Grade 2 Secondary (Literary) contribute toward illustrating the following concepts: (cont'd)						
d. Arabian cultural heritage?	19.2	35.4	28.5	13.1	3.8	3.53 (1.06)
e. the foundations of Arab nation?	9.9	30.9	33.6	17.6	8.0	3.17 (1.09)
f. demographic characteristic?	8.0	28.3	31.9	22.3	9.6	3.03 (1.10)
g. relationships between resources, population and population problems?	15.3	22.2	34.1	21.1	7.3	3.17 (1.15)
h. science of economy and its characteristics?	11.5	25.6	34.4	21.4	7.3	3.13 (1.10)
i. economic development?	7.8	29.5	32.6	22.5	7.8	3.07 (1.07)
j. strategy of social work?	18.0	26.1	30.3	18.0	7.7	3.29 (1.18)
k. adult education and literacy?	26.1	30.3	26.4	12.3	5.0	3.60 (1.14)
l. Arab leagues educational, scientific and cultural organization (ALECSO)?	16.6	29.6	27.5	21.1	5.3	3.31 (1.14)
m. united nation educational, scientific and cultural organization (UNESCO)?	13.3	33.5	24.2	19.4	9.7	3.21 (1.19)
24. To what extent does the unit (the present of the the Islamic World) in the Civil Education Curriculum for Grade 3 Secondary (Literary) illustrate the following concepts:						
a. concept of Islamic civilization?	36.9	34.6	14.4	9.5	4.6	3.90 (1.14)
b. Islamic view of the universe, man and life?	33.8	31.2	20.9	10.3	3.8	3.81 (1.13)
c. Islamic culture?	28.2	41.2	17.9	9.2	3.4	3.82 (1.05)
d. Islamic Education?	29.5	31.8	24.9	10.7	3.1	3.74 (1.09)
e. social system in Islam?	23.0	33.7	29.1	10.3	3.8	3.62 (1.07)
f. goal of life in Islam?	25.3	39.8	20.3	12.3	2.3	3.74 (1.04)
g. cultural characteristics of Muslim peoples?	24.3	37.1	25.5	8.5	4.6	3.68 (1.08)
h. beliefs and basic thoughts of Islam?	23.6	32.2	28.3	12.4	3.5	3.60 (1.08)
i. Non-Arab Islamic states?	25.5	30.0	22.2	16.5	5.8	3.53 (1.20)
j. Muslim minorities?	14.1	28.6	31.5	15.5	10.3	3.21 (1.18)
k. Organization of Islamic conference?	10.5	24.1	37.7	18.3	9.4	3.08 (1.11)
l. importance of contemportary Muslim world?	12.6	23.6	40.8	12.6	10.5	3.15 (1.13)
m. Horizons of contemporary Muslim world?	10.9	22.4	37.2	16.9	12.6	3.02 (1.16)
25. To what extent does the Human Culture curriculum for Grade 2 Secondary (literary) contribute to illustrating the following concepts:						
a. philosophic thought?	18.2	29.1	27.5	15.9	9.3	3.31 (1.21)
b. sound thinking?	19.8	32.6	22.9	16.7	8.1	3.39 (1.21)
c. basic psychology concepts?	21.5	25.0	24.6	18.8	10.0	3.29 (1.27)
d. philosophy: meaning, divisions, and benefits?	31.2	27.7	19.2	14.2	7.7	3.60 (1.27)
e. logic: definition, divisions, and benefits?	23.8	27.2	24.1	17.2	7.7	3.42 (1.24)
f. jurisprudence and issues?	13.0	26.8	32.6	18.4	9.2	3.16 (1.15)
g. direct inference?	12.2	30.5	27.9	22.1	7.3	3.18 (1.13)
h. analogical deduction and induction?	15.2	24.3	30.8	22.4	7.2	3.18 (1.16)
i. misleadings?	12.4	28.3	24.8	22.9	11.6	3.07 (1.21)
j. methods of research and thinking?	18.3	25.6	29.8	16.0	10.3	3.26 (1.23)
k. referencing and footnoting?	8.2	18.0	32.2	25.9	15.7	2.77 (1.16)

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
25. To what extent does the Human Culture curriculum for Grade 2 Secondary (literary) contribute to illustrating the following concepts: (cont'd)						
l. development: concept, directions, and affecting factors?	24.4	29.1	25.2	13.6	7.8	3.49 (1.22)
m. perception and attention?	24.0	30.4	24.3	14.1	7.2	3.50 (1.20)
n. intelligence, realism, and enthusiasm?	17.2	33.7	26.6	16.9	5.6	3.40 (1.12)
o. personality, attitudes, and values?	16.6	30.6	31.3	14.7	6.8	3.36 (1.13)
26. To what extent does the Islamic World Today Curriculum for Grade 3 Secondary (literary) contribute to the illustration of the following concepts:						
a. modern Arabic thought?	24.3	32.8	26.1	9.7	7.1	3.58 (1.16)
b. educational thought?	21.8	35.3	24.4	11.7	6.8	3.54 (1.15)
c. scientific thought?	15.0	29.6	27.0	19.9	8.6	3.23 (1.18)
d. social thought?	20.1	30.7	30.7	12.5	6.1	3.46 (1.13)
e. contemporary education and its problems?	19.2	27.1	29.8	18.0	5.9	3.36 (1.15)
f. basic, applied, and developmental type of scientific research?	12.9	26.2	33.1	19.8	8.0	3.16 (1.13)
g. technological development and social change?	13.7	27.1	34.4	19.1	5.7	3.24 (1.09)
h. means of communication, and their effects on culture?	16.1	26.0	29.5	22.0	6.3	3.24 (1.15)
i. originality of contemporarism?	19.0	32.7	24.6	15.7	8.1	3.39 (1.19)
j. Islamic university?	15.2	32.2	30.0	14.8	7.8	3.32 (1.14)
k. modernization and humanity?	12.0	20.9	35.1	22.2	9.8	3.03 (1.14)
l. Periodists?	9.0	13.6	32.2	27.1	18.1	2.68 (1.18)
m. nationalism and humanity?	13.3	21.3	33.0	22.9	9.6	3.06 (1.17)
n. Wehabite?	8.2	23.7	34.5	19.1	14.4	2.92 (1.16)
27. To what extent does the Civil Education and Human Culture Curricula for secondary level contribute to the realization of the following skills:						
a. acquisition of skills that satisfy students' needs?	11.9	28.7	28.0	23.9	7.5	3.14 (1.14)
b. acquisition of skills that satisfy society's needs of manpower?	8.7	29.5	25.4	26.9	9.5	3.01 (1.14)
c. moderating of open discussions?	14.4	26.9	25.0	18.2	15.5	3.06 (1.28)
d. writing of reports?	4.9	11.0	27.7	29.2	27.3	2.37 (1.14)
e. performing of exercises?	8.4	20.5	21.3	23.6	26.2	2.61 (1.30)
f. performance of clerical work?	11.4	19.7	25.8	25.8	17.4	2.82 (1.26)
g. usage of textbook as a source of learning?	29.8	23.3	23.3	15.6	8.0	3.51 (1.28)
h. performance of environmental appointing?	6.9	14.9	23.8	25.3	29.1	2.45 (1.24)
i. performance of different surveys?	3.1	6.5	26.4	29.1	34.9	2.14 (1.07)
j. usage of school library as a source of learning?	11.7	15.5	21.2	26.1	25.4	2.62 (1.33)
k. enrichment reinforcement and increasing the effect of learning?	16.9	23.8	35.2	16.9	7.3	3.26 (1.14)
l. reference to appropriate resources in the library?	9.5	16.8	19.8	32.8	21.0	2.61 (1.25)
m. organization of field trips and celebration of religious, nationalistic, local and universal events?	14.3	18.5	18.1	16.2	32.8	2.65 (1.46)

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Fourth: Arabic Language						
28. As you have studied grammar and inference topics:						
a. To what extent did you acquire grammatical skills?	11.8	24.0	28.2	24.0	11.8	3.00 (1.20)
b. To what extent did you acquire language habits?	12.6	21.5	33.7	22.2	10.0	3.05 (1.16)
29. As you have studied critique and eloquence topics:						
a. To what extent was your interest for reading in critique and eloquence excited?	14.4	31.6	25.5	20.9	7.6	3.24 (1.16)
b. To what extent was your literary appreciation sense developed?	13.5	34.4	27.4	15.8	8.9	3.28 (1.15)
30. As you have studied reading topics:						
a. To what extent did they contribute to your grammar and thought resources?	18.5	33.5	14.0	1.3	1.3	4.69 (0.74)
b. To what extent did they contribute to your acquisition of technical and practical styles and attitudes?	10.4	29.7	29.7	20.5	9.7	3.11 (1.14)
31. As you have studied Literary Test topics:						
a. To what extent did they contribute to your developing literary appreciation?	22.9	31.7	25.6	13.7	6.1	3.52 (1.16)
b. To what extent did they help you make sound literary judgements on your readings?	11.2	29.8	29.8	21.3	7.8	3.16 (1.12)
c. To what extent did they help you achieve the skill of criticism?	8.8	22.6	36.4	21.5	10.7	2.97 (1.11)
d. To what extnt do you depend on yourself in analyzing some literary texts?	11.1	30.5	29.0	21.0	8.4	3.15 (1.13)
32. In light of your having studied History of literature and biographies:						
a. To what degree do you agree on specifying grade 2 and grade 3 literary, and not Grade 1, with studying History of Literature and Biographies?	16.4	26.0	17.9	21.8	17.9	3.01 (1.36)
b. To what extent do you agree that History of Literature is to be studied by narrating of literary facts without use of text analysis first and later inference of facts from them?	9.5	19.1	24.8	27.5	19.1	2.73 (1.24)
c. To what degree do you agree that literary Biographies are to be studied by narrating of literary facts and mentioning of examples of the works of the biographee without analyzing them, and inferring specifics for them?	9.5	19.0	28.1	26.6	16.7	2.78 (1.21)
d. To what extent is there coherence of studying History of Literature and selected literary texts (poems and prose) of the same period?	16.7	34.2	22.1	17.1	9.9	3.31 (1.22)

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
33. In light of what you studied from prosody and poetic rhyme:						
a. To what extent do you agree that this branch of language is to be taught to students of the literary section of the secondary level?	20.3	25.3	19.9	15.7	18.8	3.13 (1.40)
b. To what extent are the selected topics for the literary section grades appropriate for student's capabilities and aptitudes?	9.2	27.7	33.8	19.6	9.6	3.07 (1.11)
c. To what extent are these two branches (prosody and rhyme) in accord with your interests, concerns, and needs?	8.9	27.5	26.4	22.1	15.1	2.93 (1.21)
d. To what extent are you able to understand prosody terminology and their application to poetic phrases?	7.7	22.3	22.3	26.9	20.8	2.69 (1.24)
e. To what extent were you able to acquire skill in identifying phonetic syllables and their corresponding symbols, and poetic footings?	8.2	16.7	28.0	24.5	22.6	2.63 (1.23)
f. To what extent are you able to refer poetic verses to their poetic rhythms?	5.8	19.0	27.5	23.6	24.0	2.59 (1.21)
g. To what extent is poetic scanning difficult for you?	2.8	14.9	28.4	23.4	30.5	2.36 (1.15)
h. To what extent is it difficult for you to correspond phonetic syllables that represent phonetic units with their appropriate symbols and footings?	4.7	19.1	28.9	26.2	21.1	2.60 (1.15)
i. To what extent is the sum of prosody terminology much for you?	7.8	20.3	27.3	28.1	16.4	2.75 (1.18)
j. To what extent are resemblance of verse compositions confusing for you?	13.4	18.5	28.4	19.8	19:8	2.86 (1.30)
Fifth: Islamic Education						
34. To what extent are the practical performances of Islamic liturgy:						
a. an integrated part in Islamic Education?	40.9	31.4	20.1	5.3	2.3	4.03 (1.02)
b. a basic part in method of teaching of Islamic Education?	31.5	38.5	18.8	7.7	3.5	3.87 (1.05)
35. The six aspets of the Islamic Education curriculum are: The Quuran, The Hadith, Belief (A'keedah) Worship, The Prophet's Biography, and Islamic Systems. To what degree do you feel that some degree of continuity and integration was realized among these aspects as a result of the way the curriculum treated these aspects?	30.8	37.6	20.2	9.5	1.9	3.86 (1.02)
36. To what extent does the Islamic Education subject matter emphasize the historical aspects of Islam?	18.7	43.9	25.2	9.2	3.1	3.66 (0.98)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
37. To what extent does the Islamic Education subject-matter help you develop basic attitudes and skills of logical thinking namely:						
a. deductive thinking: application of general principles on special cases?	18.7	38.2	26.3	13.0	3.8	3.55 (1.06)
b. inductive thinking: arriving at a general principle or rule from special cases?	15.3	31.7	32.1	16.0	5.0	3.36 (1.08)
38. To what extent do the Islamic Education Subject-matter encourage you to read extracurricularly Islamic reference and major books?	28.9	32.3	20.9	11.0	6.8	3.65 (1.20)
39. The Islamic Education Curriculum for Secondary Level is constituted as six separate lessons corresponding to six aspects of Islamic Education. To what degree do you see the separate lesson method as actualizing the intereded integration of these aspects?	16.8	33.2	31.7	13.0	5.3	3.43 (1.08)
40. The Islamic Education Curriculum aims at achieving at the Secondary Levels certain objectives. To what extent were the following objectives realized:						
a. completing the building of an integrated Islamic personality by considering all developmental domains namely: physical, spiritual, cognitive and behaviour?	30.7	36.0	23.5	6.8	3.0	3.85 (1.03)
b. developing and stabilizing loyalty to GOD, belonging to the Islamic Nation, and pride in Islam as belief and as system of life?	59.8	22.3	9.8	5.3	2.7	4.31 (1.03)
c. reinforcing behaviour based on commitment to Islamic principles and teachings for individual and group behaviour?	34.0	35.1	21.8	5.3	3.8	3.90 (1.05)
d. developing positive attitudes based on Islamic teachings that will help a Muslim confront contemporary challenges?	27.8	39.2	20.5	8.7	3.8	3.78 (1.06)
e. identify Islamic systems that warn against disadvantages of man-made systems so as to be able to confront challenges of non-Islamic intellectual and cultural invasion to which a Muslim may be exposed to in contemporary life?	31.6	36.1	20.5	7.6	4.2	3.83 (1.09)
<u>Sixth: General Science</u>						
41. The General Science subject matter for Grade 2 and 3 Literary is comprised of several topics that represent some contemporary problems in human society. To what degree has satisfactorily comprehension of the following problems enabled you to participate in discussing and suggesting solutions:						
a. science and scientists?	14.6	38.8	28.8	13.1	4.6	3.46 (1.04)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
41. The General Science subject matter for Grade 2 and 3 Literary is comprised of several topics that represent some contemporary problems in human society. To what degree has satisfactorily comprehension of the following problems enabled you to participate in discussing and suggesting solutions: (cont'd)						
b. science and man's health?	28.7	40.6	17.2	12.3	1.1	3.84 (1.02)
c. science and the world food problem?	28.2	37.1	22.8	9.3	2.7	3.79 (1.04)
d. the universe?	20.7	30.5	28.5	14.5	5.9	3.46 (1.14)
e. transportation?	16.9	29.6	31.9	15.8	5.8	3.36 (1.11)
f. communication?	18.0	28.4	27.6	18.0	8.0	3.30 (1.19)
g. oil?	34.6	30.8	20.0	11.9	2.7	3.83 (1.11)
h. solar energy?	26.2	27.7	22.7	15.0	8.5	3.48 (1.26)
i. nuclear energy?	13.8	28.8	24.6	15.8	16.9	3.07 (1.30)
j. environment and pollution?	27.1	31.9	23.5	13.9	3.6	3.65 (1.13)
k. meteorology and weather forecasting?	14.5	19.6	28.5	21.0	16.4	2.95 (1.28)
Seventh: Mathematics						
Mathematics at the Secondary Level is a group of integrated topics. In each topic there are related concepts, mathematical terminology, and generalizations that provide students with necessary skills.						
42. To what extent did you comprehend the following concepts and skills:						
a. laws of exponents and logarithms?	21.7	21.3	26.0	12.8	18.2	3.16 (1.39)
b. exponential functions and logarithmic functions?	16.3	23.0	25.3	18.3	17.1	3.03 (1.33)
c. regular calculation principle, binomial theory, and factorization?	10.9	20.2	27.6	21.8	19.5	2.81 (1.27)
d. summation and the use of symbol (E)?	8.3	15.4	31.9	20.9	23.6	2.64 (1.23)
e. series and progressions, and finding the general term?	12.0	18.5	30.5	18.1	20.8	2.83 (1.29)
f. linear equations in two variables?	8.1	23.2	28.2	20.8	19.7	2.79 (1.23)
g. finding the solution set, and identifying the solution area?	7.8	24.3	29.4	18.4	20.0	2.82 (1.23)
h. concept of limit of a finite function?	18.0	21.5	22.2	19.2	19.2	3.00 (1.38)
i. finding the derivative of a function and its geometric interpretation?	10.5	17.5	24.5	27.6	19.8	2.71 (1.26)
j. finding the derivative of the product of two functions?	13.5	21.2	25.9	22.4	17.0	2.92 (1.29)
k. finding the derivative of the division of two functions?	7.5	19.8	26.6	25.0	21.0	2.68 (1.22)
l. concepts of maxima of functions?	9.7	19.0	27.5	24.0	19.8	2.75 (1.25)
m. concept of the theory of maxima?	8.1	18.1	26.6	26.3	20.8	2.66 (1.22)
n. curve plotting?	8.2	20.8	25.3	22.9	22.9	2.69 (1.26)
o. concept of integrals and finding the integration of polynomial functions?	11.8	18.5	31.5	15.7	22.4	2.82 (1.30)
p. calculations of areas and volumes by integration?	4.7	17.7	30.2	21.6	25.9	2.54 (1.19)
q. concept of statistics?	5.2	16.0	26.9	25.0	26.9	2.48 (1.19)
r. finding measures of central tendency and variation?	2.4	8.7	30.0	24.6	34.3	2.20 (1.08)
s. finding correlation coefficient?	2.5	6.4	36.8	23.0	31.4	2.26 (1.05)
t. concept of uniform probability?	4.8	10.6	31.9	28.0	24.6	2.43 (1.12)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
42. To what extent did you comprehend the following concepts and skills: (cont'd)						
u. finding probability and probable distribution?	4.3	10.6	30.3	28.4	26.4	2.38 (1.11)
v. perform calculations on the random variable and its concept?	4.3	10.6	31.3	25.5	28.4	2.37 (1.13)
w. application of probability rules and laws on life situations and exercises?	4.7	8.5	31.3	15.6	39.8	2.23 (1.20)
Eighth: English Language						
43. To what extent do you feel that the English Language curriculum realized the following objectives:						
a. enriched your knowledge about the outside world?	14.0	22.7	22.0	17.8	23.5	2.86 (1.38)
b. provided you with basic English language skills that enable you to express yourself in written and oral English with foreign nationals in and outside Oman?	9.0	18.8	28.9	21.9	21.5	2.72 (1.25)
c. enabled you to use English effectively and creatively in both casual and formal situations?	4.5	14.4	25.8	31.8	23.5	2.45 (1.13)
d. encouraged you to read books, journals and magazines in English outside the curriculum?	7.9	15.5	21.5	29.4	25.7	2.51 (1.25)
44. To what extent does the English language curriculum content provide you with exercises and drills enabling you to master the following basic skills:						
a. listening?	14.4	25.4	22.0	22.7	15.5	3.00 (1.30)
b. speaking?	9.1	24.3	28.5	19.4	18.6	2.86 (1.24)
c. reading?	14.7	31.7	19.2	22.6	11.7	3.15 (1.26)
d. writing?	14.9	29.0	23.7	13.7	18.7	3.08 (1.33)
e. comprehension?	11.3	26.5	25.3	15.6	21.4	2.91 (1.31)
45. To what extent does the English Language curriculum emphasize the following:						
a. silent reading speed and comprehension?	9.9	24.4	25.2	24.4	16.0	2.88 (1.23)
b. reading aloud with fluency and precise pronunciation?	12.7	25.9	22.0	20.8	18.5	2.93 (1.31)
46. To what extent were English language cassettes useful to you in regard to:						
a. providing good pronunciation model?	11.7	17.8	23.5	22.3	24.6	2.70 (1.33)
b. promoting and practicing listening comprehension?	9.2	19.8	22.5	26.0	22.5	2.67 (1.27)
c. presenting difficult materials such as dialogs and songs?	11.1	22.9	21.8	20.2	24.0	2.77 (1.34)
47. To what extent were the "Reading for Information Texts" useful to you in regard to:						
a. simulating essays and stories from newspapers or magazines?	8.1	23.1	21.5	25.8	21.5	2.70 (1.26)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
47. To what extent were the "Reading for Information Texts" useful to you in regard to: (cont'd)						
b. encouraging your rapid silent reading of quite difficult texts in order to extract the main points and factual information?	11.2	20.5	22.4	23.2	22.8	2.74 (1.32)
48. To what extent was the English Language curriculum successful in enabling you to master the following functional skills:						
a. feeling at ease with the English language so you could give simple instructions and directions in a sequential manner?	8.9	23.9	24.3	28.6	14.3	2.85 (1.20)
b. understand the link of events in the past and accept and acknowledge social invitations in the appropriate tone and form?	5.4	18.4	28.0	27.6	20.7	2.60 (1.16)
c. use proper forms of greeting and congratulatory statements?	16.0	22.7	25.8	20.7	14.8	3.04 (1.29)
d. describe personal features of people?	10.9	25.9	22.7	23.1	17.4	2.90 (1.27)
49. To what degree does the English Language curriculum content cover specialized vocabulary from the linguistics point of view which would enable you to continue studies at the university level and be able to communicate in respect to:						
a. the personal domain?	6.9	23.9	24.7	27.0	17.4	2.76 (1.20)
b. the social domain?	4.2	18.8	29.2	29.6	18.1	2.62 (1.11)
c. the national domain?	4.2	18.1	23.1	29.2	25.4	2.47 (1.17)
d. the international domain?	5.4	13.0	24.9	27.2	29.5	2.38 (1.19)
e. the scientific domain?	3.5	14.7	27.5	28.7	25.6	2.42 (1.12)
f. the literary and cultural domain?	6.2	14.8	23.0	30.0	26.1	2.45 (1.20)
g. the geo-political domain?	5.2	12.9	22.9	28.1	30.9	2.33 (1.19)
50. To what extent does the English Language Curriculum encourage you to think creatively and independently?	7.5	20.8	23.1	23.1	25.5	2.62 (1.27)

SECTION II: METHODS OF TEACHING

1. To what degree do you see that the teacher relates subject matter to life situations and practical exercises?	15.8	24.4	31.6	16.9	11.3	3.17 (1.21)
2. To what extent does the teacher employ a variety of approaches appropriate to the nature of the subject matter?	10.1	32.8	26.5	20.5	10.1	3.12 (1.15)
3. To what degree do you feel the teacher employs several methods of teaching appropriate to different students' abilities including the high achievers, average and weak achievers?	18.7	23.7	27.1	19.1	11.5	3.19 (1.27)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
4. To what extent does the teacher encourage independent learning approach, e.g. students performance of research, studies and experiments by themselves?	10.1	22.1	28.8	24.0	15.0	2.88 (1.21)
5. To what extent does the teacher employ project or team approach when conducting lessons?	5.6	17.3	29.7	30.1	17.3	2.64 (1.13)
6. To what extent does the teaher employ different instructional media in lesson demonstration?	7.9	24.4	29.7	21.4	16.5	2.86 (1.19)
7. To what extent does the teacher's approaches encourage teacher-pupil interaction and allow students' to express opinions?	16.6	27.2	24.5	18.5	13.2	3.16 (1.28)
8. From your point-of-view, what degree of integration exists between textbook contents and the teacher's class activities?	8.2	27.0	35.2	15.7	13.9	3.00 (1.15)
9. To what extent do methods of teaching at the Secondary level help you develop the following critical thinking habits and attitudes:						
a. suspending judgement?	11.9	35.1	28.4	19.4	5.2	3.29 (1.07)
b. investigate accuracy of 15.4?	15.4	31.2	22.6	21.4	9.4	3.22 (1.22)
c. evaluating data resources?	9.4	19.9	31.8	25.1	13.9	2.86 (1.17)
d. employing a variety of information resources?	12.7	28.8	21.3	19.9	17.2	3.00 (1.30)
SECTION III: MATERIAL FACILITIES						
1. To what degree do you feel that your Secondary SSchool is an educational environment for the students cognitive development?	26.7	34.2	19.5	10.9	8.6	3.59 (1.23)
2. What is your judgement of classroom facilities from the following perspectives: space, furniture, lighting, ventilation, equipment and apparatus?	19.2	25.2	20.7	20.7	14.3	3.14 (1.34)
3. To what extent was school laboratory useful in the following aspects:						
a. ensuring the comprehension of theoretical concepts you have already studied?	8.0	27.0	24.7	20.2	20.2	2.83 (1.25)
b. acquisition of skillful use and manipulation of laboratory apparatus and materials?	5.7	19.9	25.3	25.3	23.8	2.59 (1.21)
c. schematizing results, drawing graphs, and writing lab-reports?	3.5	15.4	27.2	24.8	29.1	2.39 (1.16)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
4. To what extent was school library useful in the following aspects:						
a. identify library reference system and fast location of required references?	13.2	21.4	29.3	21.1	15.0	2.97 (1.25)
b. reading references related to subject-matter?	7.5	23.0	29.8	24.2	15.5	2.83 (1.17)
c. general reading and general culture?	12.1	28.6	30.6	16.9	11.7	3.13 (1.18)
5. To what degree do you feel that instructional media available at your school is adequate and appropriate for the Secondary Level subject-matters?	9.4	27.1	27.5	18.8	17.3	2.93 (1.24)
6. To what extent are the following places and facilities related to different activities sufficient and appropriate:						
a. clubs?	10.1	10.5	26.0	20.5	32.9	2.44 (1.31)
b. fairs?	6.5	18.5	21.9	24.2	28.8	2.50 (1.26)
c. sport stadiums?	12.0	18.5	21.6	22.4	25.5	2.69 (1.35)
d. theatres?	6.9	6.2	20.8	20.0	46.2	2.08 (1.24)
e. mosque?	43.7	18.0	13.0	10.0	15.3	3.65 (1.49)
SECTION IV: EVALUATION						
1. Evaluation process at the Secondary Level often includes several tests. To what degree do you feel the following tests are appropriate for the Secondary level student:						
a. objective-question tests: true-false, completion, multiple-choice?	46.2	29.2	15.2	4.5	4.9	4.07 (1.11)
b. subjective tests: student is asked to answer in detail?	19.9	29.9	28.4	13.8	8.0	3.40 (1.18)
c. performance tests: laboratory experiments?	9.3	25.5	27.0	21.6	16.6	2.89 (1.23)
2. To what degree do you see that the tests you had at the Secondary level measure the following:						
a. retention of facts?	13.3	32.6	30.3	18.9	4.9	3.30 (1.08)
b. understanding?	17.1	35.0	25.1	14.8	8.0	3.38 (1.17)
c. ability to analyze?	9.5	26.2	32.3	22.4	9.5	3.04 (1.12)
d. ability to apply?	9.9	29.0	30.9	21.0	9.2	3.10 (1.12)
e. problem-solving?	8.6	29.9	29.5	20.1	11.9	3.03 (1.15)
3. To what extent did the teacher depend on:						
a. lesson stage tests?	9.9	33.6	29.0	18.3	9.2	3.17 (1.12)
b. monthly periodic tests?	12.8	25.3	30.4	21.4	10.1	3.09 (1.18)
c. final tests?	16.9	26.3	24.3	20.8	11.8	3.16 (1.26)

Student Sciences

PART 1: GENERAL DATA

Item	Percent
1. Sex:	
male	60.8
female	37.3
2. Nationality:	
Omani	93.1
Non-Omani	5.8
3. Name of your school district:	
Muscat	11.5
Batinah	10.7
Roustaq	11.5
Dakhiliyah	11.5
Sharqiyah	11.5
Wousta	11.1
Dhahirah	11.5
Janoubiyah	11.5
Musandam	9.2

Student Sciences

PART II

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
SECTION 1: CURRICULUM AND SUBJECT MATTERS						
A. General						
1. To what degree do you believe that subject-matters you are studying at the Secondary Level form an integrated and cohesive structure of information?	13.4	50.2	25.7	6.9	3.8	3.63 (0.94)
2. To what degree do you see subject-matters handle local environment in such a way that enable you to assess social needs and methods for achieving social objectives?	4.6	25.7	37.5	24.5	7.7	2.95 (1.00)
3. To what degree do subject-matters at the Secondary Level help you acquire the following basic skills:						
a. cognitive skills?	37.5	43.2	10.8	5.0	3.5	4.06 (1.00)
b. social skills?	8.9	22.9	39.9	20.5	7.8	3.05 (1.05)
c. psychomotor skills?	1.6	6.7	21.3	27.2	43.3	1.96 (1.03)
4. To what extent does the curriculum help you comprehend contemporary scientific and technological developments?	15.5	45.0	20.9	11.6	7.0	3.50 (1.10)
5. To what extent do your secondary studies help you discover, refine, and develop your talents:						
a. literary talents?	10.9	17.8	41.1	20.2	10.1	2.99 (1.11)
b. scientific talents?	21.0	46.7	20.6	7.8	3.9	3.73 (1.01)
6. To what degree do you believe the curriculum for Secondary Level achieves balance among concepts, skills, social aspects, attitudes and values?	9.8	36.3	34.0	14.8	5.1	3.31 (1.01)
7. To what degree do you see the way subject-matter is studied, helps and guides you to sound scientific - thinking style in solving-problems and in identifying basic processes such as induction, experimentation measurement, and deduction?	15.8	36.7	29.7	10.0	7.7	3.43 (1.11)
8. To what extent do your studies at Secondary Level contribute to your development of sound reading habits so that you would be able to continue researching topics you are interested in a variety of references?	16.9	33.7	25.7	15.3	8.4	3.35 (1.18)
9. To what extent does your study enable you to judge, discuss, and appreciate or reject what you read?	14.9	41.8	29.1	10.0	4.2	3.53 (1.00)
10. To what extent does your secondary study contribute to deepening your sense of self-respect, loyalty to country, and to all Arab homeland?	64.9	22.8	7.7	3.1	1.5	4.46 (0.88)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
11. To what extent does this level of study develop in you a positive attitude towards environmental protection and natural resources conservation?	42.7	38.8	10.4	6.9	1.2	4.15 (0.95)
12. To what extent do subject-matter materials contribute to developing cooperative spirit, enjoyment of group work, and respect for other options?	36.8	32.9	19.4	8.1	2.7	3.93 (1.06)
13. To what extent do subject-matter materials at the Secondary Level encourage participation in class and extra-class activities and develop some interests such as: artistic, literary, scientific, and technological?	8.5	32.0	29.3	20.1	10.0	3.09 (1.12)
14. To what degree do you feel that the standard of the subject-matter material is appropriate for the age level in each grade?	12.0	30.1	31.3	19.7	6.9	3.21 (1.10)
15. To what degree do you feel that you benefitted from what you studied in Grade 1 Secondary in the following subject-matters:						
a. History?	26.5	31.9	23.3	12.1	6.2	3.60 (1.18)
b. Geography?	6.6	25.0	30.1	24.2	14.1	2.86 (1.14)
c. Civic Education?	36.7	31.3	19.5	7.4	5.1	3.87 (1.14)
B. Chemistry						
16. Chemistry subject-matter in Secondary Level is constructed as a number of units each constitutes a group of basic concepts. To what degree do you feel that you have understood the concepts sufficiently to refer easily, when needed to the following concepts:						
a. behavior of matter as a basis of the structure of atom?	18.8	42.7	23.8	10.4	4.2	3.62 (1.04)
b. chemical reactions, and the concept of chemical equation?	24.7	41.3	19.3	10.8	3.9	3.72 (1.07)
c. behavior of gases and the gas laws?	28.3	37.6	22.5	8.5	3.1	3.80 (1.04)
d. characteristics of liquids and solids and the effect of heat on their molecules?	40.3	32.6	17.8	7.0	2.3	4.02 (1.04)
e. electrical conductivity and the electric nature of matter?	17.1	41.6	26.5	12.1	2.7	3.58 (1.00)
f. atomic structure and the periodic table of elements?	14.7	27.5	31.4	17.1	9.3	3.21 (1.17)
g. chemical bonds and molecular structure?	19.0	29.8	28.7	15.9	6.6	3.39 (1.16)
h. energy changes in chemical reactions?	11.8	25.5	39.6	19.2	3.9	3.22 (1.02)
i. speed of chemical reactions?	16.1	32.2	35.3	11.0	5.5	3.42 (1.06)
j. dynamic equilibrium in chemical reactions?	24.8	31.5	28.3	9.8	5.5	3.60 (1.13)
k. acids and bases?	46.5	30.2	15.5	4.3	3.5	4.12 (1.05)
l. oxidation and reduction?	31.1	29.2	24.5	8.9	6.2	3.70 (1.18)
m. organic compounds?	16.5	28.7	21.3	25.2	8.3	3.20 (1.22)
n. chemistry of living matter?	12.2	29.7	25.3	20.5	12.2	3.09 (1.22)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
16. Chemistry subject-matter in Secondary Level is constructed as a number of units each constitutes a group of basic concepts. To what degree do you feel that you have understood the concepts sufficiently to refer easily, when needed to the following concepts: (cont'd)						
o. halogines?	5.2	17.4	39.4	20.2	17.8	2.72 (1.11)
p. alkaline earthes?	3.2	14.8	35.4	21.2	25.4	2.49 (1.12)
q. elements of the third period of the periodic table?	5.4	15.8	39.9	21.7	17.2	2.70 (1.10)
r. transition elements?	9.2	17.5	39.8	16.0	17.5	2.85 (1.18)
s. radio activity and nuclear changes?	10.2	18.3	32.5	17.8	21.3	2.78 (1.26)
17. Chemistry Curriculum at the Secondary Level contains several exercises, laboratory experiments, and practical activities that aim to develop special skills and concepts included in the units. To what degree do you feel that in implementing these activities and laboratory applications - you have acquired the following skills:						
a. performing laboratory experiments to study:						
1. relationships between volume, pressure, and temperature of gases?	20.1	31.7	23.9	14.7	9.7	3.38 (1.23)
2. measuring the melting point of a pure material?	15.9	36.0	24.8	12.0	11.2	3.33 (1.21)
3. measuring the heat of reaction and the heat of neutralization?	7.5	26.0	34.3	18.9	13.4	2.95 (1.13)
4. studying the effect of a catalyst through studying chemical equilibrium?	14.3	26.7	29.1	21.3	8.5	3.17 (1.17)
5. electro-chemical analysis of water and ionized solutions?	25.3	34.6	23.0	11.3	5.8	3.62 (1.15)
6. electroplating copper and silver?	39.8	27.0	17.6	8.6	7.0	3.84 (1.24)
7. relations between the number of moles of electrons and atoms in copper and silver?	5.2	15.1	39.8	25.9	13.9	2.72 (1.05)
8. volume hydrogen produced by reaction of acid and metal?	6.0	20.4	34.8	25.6	13.2	2.80 (1.09)
9. identification of gases through flame test?	18.7	24.5	24.1	19.8	12.8	3.16 (1.30)
10. properties of elements and their reactions and structures in compounds?	9.8	23.4	32.8	23.4	10.7	2.98 (1.14)
11. finding the solubility product of a compound?	6.6	27.7	32.6	22.7	10.3	2.98 (1.09)
12. acid-alkali reactions, titration and use of indicators?	18.9	32.1	23.7	16.5	8.8	3.36 (1.21)
13. preparation of organic compounds and identifying their characteristics?	13.8	22.8	26.8	21.1	15.4	2.98 (1.27)
14. test for sugar, starch, and proteins?	24.1	31.5	21.2	14.5	8.7	3.48 (1.25)
15. comparison of degrees of water-hardness?	5.2	16.2	37.6	19.5	21.4	2.64 (1.14)
16. studying the properties of some gases of vital importance?	6.0	21.8	31.9	20.8	19.4	2.74 (1.18)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
17. Chemistry Curriculum at the Secondary Level contains several exercises, laboratory experiments, and practical activities that aim to develop special skills and concepts included in the units. To what degree do you feel that in implementing these activities and laboratory applications - you have acquired the following skills: (cont'd)						
b. Knowledge of natural resources in Oman from your visits to fields and mines where these ores are extracted?	7.8	9.1	15.9	15.5	51.7	2.06 (1.32)
c. manipulation of laboratory apparatus of chemistry experiments, handling concentrated acids, and dangerous materials?	8.5	13.6	20.8	19.5	37.7	2.36 (1.33)
Physics						
18. Physics subject-matter at the Secondary Level consists of several independent units each including a group of main concepts. To what degree do you feel you have comprehended the following concepts so that you can refer to them in solving related problems:						
a. concepts of measurements, fundamental and derived units of physical quantities?	12.8	30.8	31.6	16.4	8.4	3.23 (1.13)
b. concepts of motion, force, work, energy and power?	25.2	40.8	21.2	9.2	3.6	3.75 (1.05)
c. concepts of hydrostatics and hydrodynamics?	4.0	27.3	35.7	21.7	11.2	2.91 (1.05)
d. concepts concerning laws of conservation of mass and energy?	15.5	33.1	30.7	15.5	5.2	3.38 (1.08)
e. concepts of heat and thermodynamics?	9.1	30.2	29.4	25.8	5.6	3.12 (1.07)
f. waves and combinations of waves?	9.3	24.0	29.7	19.9	17.1	2.89 (1.22)
g. concepts concerning forces and fields:						
1. electric field?	24.6	36.9	22.2	11.9	4.4	3.66 (1.11)
2. magnetic field?	19.0	30.2	23.8	19.0	7.9	3.33 (1.21)
3. gravitational field?	10.3	31.3	28.8	18.9	10.7	3.12 (1.16)
h. concepts concerning development of atomic structure and modern quantum theory?	4.0	17.7	35.8	30.1	12.4	2.71 (1.03)
i. concepts concerning nucleus and natural and artificial radioactivity?	5.0	14.9	28.8	27.5	23.9	2.50 (1.15)
19. Physics Curriculum contains a group of practical exercises and activities that aim to develop students' skills and concepts presented in units. To what degree do you feel that - through performing these activities and practical exercises - you have acquired the following skills:						
a. dealing with fundamental units of physical quantities and deriving and applying other units?	8.8	26.1	30.5	22.9	11.6	2.98 (1.15)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
19. Physics Curriculum contains a group of practical exercises and activities that aim to develop students' skills and concepts presented in units. To what degree do you feel that - through performing these activities and practical exercises - you have acquired the following skills: (cont'd)						
b. defining errors and degree of accuracy of measurement?	5.6	16.7	33.9	31.1	12.7	2.71 (1.07)
c. using appropriate equipment to measure the following:						
1. different lengths using vernier, micrometer, and spherometer, and calculation of areas of volumes?	8.8	21.9	31.5	24.3	13.5	2.88 (1.16)
2. masses, using balances with different sensitivities and calculation of density?	5.2	22.3	33.1	27.5	12.0	2.81 (1.07)
3. time, using stop watches, ticker timer and stroposcope, and calculation of velocity and acceleration?	12.3	30.4	24.1	20.2	13.0	3.09 (1.23)
4. force, using spring balance?	16.3	33.9	25.9	17.5	6.4	3.36 (1.14)
5. circular motion and calculation of moments of inertia?	6.2	18.3	39.4	27.0	9.1	2.86 (1.03)
6. liquid pressure, upthrust, speed of liquids, and viscosity?	4.1	16.5	33.9	30.2	15.3	2.64 (1.06)
d. performing experiments to illustrate or verify the following relations:						
1. melting point of naphthaline or wax?	12.5	22.6	28.2	21.8	14.9	2.96 (1.24)
2. relation between volume of gas and its pressure at constant temperature?	14.9	29.7	28.5	19.3	7.6	3.25 (1.16)
3. relation between volume of gas and its temperature at constant pressure?	15.2	28.4	28.8	20.8	6.8	3.24 (1.15)
4. relation between length of a spring and the force exerted on it?	11.6	30.4	25.2	20.8	12.0	3.09 (1.21)
5. getting the resultant of two vectors?	16.8	27.2	29.2	16.4	10.4	3.24 (1.21)
6. velocity of falling bodies and acceleration due to gravity?	8.9	26.8	30.1	24.8	9.3	3.01 (1.12)
7. measurement of the uplifting force of a liquid and verification of Archemides rule?	7.3	22.4	38.6	23.6	8.1	2.97 (1.04)
8. measuring liquid velocity and coefficient of viscosity?	3.7	17.1	33.1	29.0	17.1	2.61 (1.07)
9. specific heats of solids and liquids?	7.9	18.2	36.4	26.4	11.2	2.85 (1.09)
10. mechanical equivalent of heat?	7.3	16.3	29.4	31.0	15.9	2.68 (1.14)
11. transfer of energy from one form to another?	24.8	35.6	24.0	11.6	4.0	3.66 (1.10)
12. wave combinations and standing waves?	14.1	29.0	27.0	21.0	8.9	3.19 (1.18)
13. diffraction of waves and application of diffraction greating?	7.4	24.0	29.8	26.9	12.0	2.88 (1.13)
14. measuring small distances using interferometry?	4.5	15.1	34.3	30.2	15.9	2.62 (1.06)
15. photo-electric effect?	3.0	13.7	28.6	32.5	22.2	2.43 (1.07)
16. finding blank's constant?	6.1	15.9	32.1	26.8	19.1	2.63 (1.14)
17. ratio of electron charge to its mass?	11.3	26.4	25.5	23.0	13.8	2.98 (1.23)
e. graphic representation of results?	13.5	22.3	24.0	22.3	17.9	2.92 (1.31)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
19. Physics Curriculum contains a group of practical exercises and activities that aim to develop students' skills and concepts presented in units. To what degree do you feel that - through performing these activities and practical exercises - you have acquired the following skills: (cont'd)						
f. representing relations in Physics by mathematical expressions?	11.1	22.1	29.1	22.5	15.2	2.91 (1.22)
g. writing laboratory reports?	5.3	12.2	22.9	26.9	32.7	2.31 (1.20)
h. executing some models and instructional aids?	7.7	16.7	28.5	26.4	20.7	2.64 (1.20)
i. applying Physics' laws in solving questions and exercises?	15.5	30.3	25.5	18.7	10.0	3.23 (1.21)
D. Biology						
20. Biology at the Secondary Level consists of several related units that form a group of basic concepts. To what degree do you feel you have understood these concepts, and are able to comprehend and discuss the following topics on organisms and environment:						
a. biology and its realm?	40.1	36.9	15.5	5.6	2.0	4.08 (0.98)
b. the earth we live on?	35.2	35.2	19.8	6.3	3.6	3.92 (1.06)
c. evolution of life on the earth?	26.3	32.7	25.9	8.8	6.4	3.64 (1.15)
d. variation of living organisms?	27.8	37.3	23.8	7.9	3.2	3.79 (1.04)
e. different types environment and their suitability to life?	28.9	33.3	25.3	10.8	1.6	3.77 (1.04)
f. the cell: material, structure, function of its parts, activities?	41.1	35.1	14.9	6.5	2.4	4.06 (1.02)
g. distinction and specialties of cells?	15.9	36.3	28.7	15.1	4.0	3.45 (1.06)
h. processes, systems in living things:						
1. photosynthesis?	17.9	35.0	30.5	14.6	2.0	3.52 (1.01)
2. digestion and digestive systems?	28.0	38.8	20.8	11.6	0.8	3.82 (1.00)
3. transportation and circulatory systems?	19.4	31.9	29.4	16.1	3.2	3.48 (1.08)
4. respiration and respiratory systems?	27.7	38.2	20.5	11.2	2.4	3.78 (1.05)
5. excretion and excretory systems?	21.0	37.9	24.2	12.5	4.4	3.59 (1.09)
6. support and skeletal systems?	28.0	34.0	22.0	11.2	4.8	3.69 (1.14)
7. movement and muscular systems?	27.8	35.5	21.8	10.1	4.8	3.71 (1.12)
8. coherence and organization in the living things?	23.9	33.2	25.9	12.1	4.9	3.59 (1.12)
9. reproductive systems and the process of reproduction and growth?	32.8	36.9	17.2	9.4	3.7	3.86 (1.09)
10. Homeostasis systems?	23.7	28.4	31.4	12.3	4.2	3.55 (1.11)
j. heredity and its laws - the chromosomes, genes, and characteristics?	18.6	28.3	26.2	16.9	10.1	3.28 (1.24)
k. concepts related to ecology:						
1. major ecological factors?	9.9	36.9	34.3	12.9	6.0	3.32 (1.02)
2. cycle of matters and energy flow?	7.1	18.2	44.0	20.9	9.8	2.92 (1.03)
3. nutritional chain and its network?	12.3	30.7	32.0	13.6	11.4	3.19 (1.17)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
21. Biology Curriculum at the Secondary Level contains units of exercises, laboratory experiments, and activities that aim at student's acquisition of certain skills and emphasizes concepts included in the units. To what degree do you believe that you have gained the following skills as a result of performing these practical activities:						
a. collection of samples and field visits, that aim at:						
1. becoming acquainted with earth crust and affecting factors?	8.8	15.3	24.5	18.9	32.5	2.49 (1.32)
2. becoming familiar with various types of rocks?	11.6	20.4	21.6	24.4	22.0	2.75 (1.32)
3. becoming informed of various types of soil and studying their characteristics?	12.9	24.1	18.7	19.1	25.3	2.80 (1.39)
4. becoming familiar with various types of plants and animals in the environment, and their classification?	10.5	28.2	21.8	22.2	17.3	2.92 (1.27)
5. studying different parts of plant?	17.7	27.4	29.0	15.7	10.1	3.27 (1.22)
6. studying the morphology of an insect, shell, plant, brain and eyes of a cow or a sheep?	12.3	18.9	21.3	17.6	29.9	2.66 (1.40)
b. dissection of some animals (a fish, a frog) in order to study their internal systems?	21.5	22.0	14.6	16.3	25.6	2.98 (1.51)
c. making slides and sections and the use of the microscope in:						
1. observing microorganisms, identifying them, and their classification?	24.0	21.2	28.0	15.2	11.6	3.31 (1.30)
2. examining different plant annd animal cells and identifying and comparing them?	20.8	30.4	24.0	12.8	12.0	3.35 (1.28)
3. examining different plant and animal tissues, identifying and comparing them?	10.2	28.5	32.1	14.2	15.0	3.05 (1.20)
4. studying slides of: bacteria, protozoa, algae, fungi, bryophyta and tracheophyta?	19.2	24.5	22.9	13.9	19.6	3.10 (1.39)
d. performing laboratory experiments to study:						
1. dispersion and permeability?	20.0	27.1	22.1	19.2	11.7	3.25 (1.29)
2. an anaerobic respiration in yeast?	6.7	23.4	28.9	15.9	25.1	2.71 (1.26)
3. factors affecting photosynthesis?	13.6	26.4	31.4	15.3	13.2	3.12 (1.22)
4. decomposition and testing of starch, proteins and fats?	17.3	25.1	25.1	18.5	14.0	3.13 (1.30)
5. coacervate and comparing to amoeba?	4.5	12.5	31.7	22.8	28.6	2.42 (1.16)
6. root pressure and transport in plants?	11.5	24.2	29.5	21.7	13.1	2.99 (1.20)
7. geotropism and phototropism in plants?	19.0	31.0	22.3	12.0	15.7	3.26 (1.33)
8. effect of auxins rooting and plant growth?	30.2	24.4	24.4	8.7	12.4	3.51 (1.33)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Student Sciences

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
21. Biology Curriculum at the Secondary Level contains units of exercises, laboratory experiments, and activities that aim at student's acquisition of certain skills and emphasizes concepts included in the units. To what degree do you believe that you have gained the following skills as a result of performing these practical activities: (cont'd)						
d. performing laboratory experiments to study:						
9. studying of the mechanism of muscular contraction by kimograph?	15.9	19.0	20.3	22.4	22.4	2.84 (1.39)
10. growing bacteria in petri dishes and the study of bacterial colonies?	6.2	11.9	24.3	23.9	33.6	2.33 (1.23)
E. Mathematics						
Mathematics courses at the Secondary Level depend on related topics that support each other. Each of these topics has its own concepts, mathematical terminology, and generalizations, which develop the students skills in related fields.						
22. To what extent have you comprehended the following concepts:						
a. concepts of logic and methods of proof?	8.1	32.3	29.2	20.0	10.4	3.08 (1.12)
b. concepts of functions and correlations?	21.2	35.4	28.8	10.8	3.8	3.59 (1.06)
c. concepts of number systems you studied?	12.3	25.4	37.7	17.1	7.5	3.18 (1.09)
d. concepts of matrices and determinants?	15.6	35.4	28.4	14.4	6.2	3.40 (1.10)
e. concepts of exponents and logarithms?	30.0	33.8	20.0	11.5	4.6	3.73 (1.14)
f. concepts of regular numbers and the binomial theorem?	21.1	37.5	23.9	13.5	4.0	3.58 (1.09)
g. concepts of series and progressions?	21.9	40.1	23.2	11.4	3.4	3.66 (1.05)
h. concepts of mathematical systems?	16.7	27.9	29.1	17.5	8.8	3.26 (1.19)
i. concepts of complex numbers?	13.0	30.8	30.4	15.8	10.1	3.21 (1.16)
j. concepts of polynomial functions and rational functions?	21.6	31.6	28.4	14.0	4.4	3.52 (1.11)
k. concepts of trigonometric functions?	12.6	35.6	32.2	14.2	5.4	3.36 (1.05)
l. concepts of solid geometry?	7.0	26.8	32.3	22.2	11.7	2.95 (1.11)
m. concepts of coordinate geometry and geometric transformations?	20.6	32.1	29.2	13.6	4.5	3.51 (1.10)
n. concepts of vectors?	17.3	31.0	31.8	14.9	5.1	3.40 (1.09)
o. concepts of conical sections?	4.6	12.8	43.4	22.4	16.9	2.66 (1.05)
p. concepts of statistics?	34.7	34.7	18.9	6.6	5.0	3.88 (1.11)
q. concepts of probability?	28.0	40.1	19.1	10.1	2.7	3.81 (1.04)
r. concepts of limits and continuity?	25.9	40.5	21.6	9.3	2.7	3.78 (1.02)
s. concepts of derivatives and differentiation?	20.4	41.9	21.5	11.9	4.2	3.62 (1.07)
t. concepts of integration?	4.8	25.1	36.2	18.4	15.5	2.86 (1.11)
23. To what degree have you acquired the following skills:						
a. diagramming truth tables for compound statements?	30.1	30.1	23.6	13.9	2.3	3.72 (1.11)
b. finding the solution set of an open statement?	26.0	35.3	24.0	11.6	3.1	3.69 (1.08)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
23. To what degree have you acquired the following skills: (cont'd)						
c. the resultant of two functions and its graphical representation?	19.9	33.2	29.3	12.1	5.5	3.50 (1.11)
d. the inverse function of a progressive function?	12.5	31.4	31.4	16.5	8.2	3.24 (1.12)
e. transformation from one number system to another?	12.0	22.5	32.9	23.7	8.8	3.05 (1.14)
f. drawing flow charts?	19.3	25.6	24.8	20.1	10.2	3.24 (1.26)
g. finding the correspondent product of a matrix?	22.8	32.7	22.8	14.6	7.1	3.50 (1.20)
h. solving matrix equation?	16.9	32.5	29.8	13.3	7.5	3.38 (1.14)
i. use of normal logarithmic tables?	20.5	36.4	22.9	15.9	4.3	3.53 (1.11)
j. factorization using binomial theorem?	24.0	34.9	25.2	10.9	5.0	3.62 (1.11)
k. testing identities?	8.0	24.4	39.2	22.4	6.0	3.06 (1.01)
l. finding sum of numerical and geometrical series?	16.3	39.9	25.6	12.4	5.8	3.48 (1.09)
m. finding limits of some series?	17.8	31.2	32.4	14.2	4.5	3.44 (1.08)
n. applying these laws for solving mathematical problems and life situations?	4.1	24.9	33.6	24.5	12.9	2.83 (1.07)
o. performing the four operations - addition, subtraction, multiplication, and division for complex numbers?	27.6	33.9	25.3	10.1	3.1	3.73 (1.07)
p. finding application forms of complex numbers?	5.7	23.9	40.5	22.7	7.3	2.98 (0.99)
q. finding nth root for the integer number (1)?	8.2	23.3	33.9	26.1	8.6	2.96 (1.08)
r. factorization of polynomials?	17.1	23.3	30.2	22.0	7.3	3.21 (1.18)
s. drawing double angle between two planes?	2.5	19.5	32.8	32.8	12.4	2.67 (1.01)
t. projection of a point and a line on a plane?	4.1	28.6	30.6	22.9	13.9	2.86 (1.10)
u. graphical representation of trigonometric functions? (sine, cosine, tangent)?	21.1	25.0	27.0	19.9	7.0	3.33 (1.21)
v. proving trigonometric identities?	11.2	21.5	37.4	23.4	6.5	3.08 (1.08)
w. general solution of triangle?	10.8	24.7	34.7	19.1	10.8	3.06 (1.14)
x. finding equation of a straight line given satisfactory conditions?	20.9	26.9	31.7	14.5	6.0	3.42 (1.15)
y. finding the equation of a circle using given conditions?	16.0	32.7	33.5	13.6	4.3	3.42 (1.05)
z. finding vector equation of a straight line?	15.7	25.6	36.2	17.7	4.7	3.30 (1.08)
aa. finding the equations of a parabola, hyperbola and ellipse, and drawing them?	7.1	20.7	28.2	27.0	17.0	2.74 (1.17)
bb. using natural distribution curves?	15.0	26.8	27.6	22.0	8.7	3.17 (1.19)
cc. measuring central tendency and variation?	24.8	32.6	23.3	13.6	5.8	3.57 (1.17)
dd. drawing distribution table and degradation?	26.1	24.1	26.9	14.5	8.4	3.45 (1.25)
ee. finding spearman's and pearson's correlation coefficients?	28.2	24.7	24.7	14.1	8.2	3.51 (1.26)
ff. computations on binomial random variable and prediction?	15.5	27.9	30.5	15.9	10.3	3.22 (1.19)
gg. performing some laboratory experiments on probability and recording the results?	14.4	22.4	33.6	19.2	10.4	3.11 (1.19)
hh. distinguishing test of a sample by restoration and non-restoration?	14.7	26.4	32.0	15.2	11.7	3.17 (1.20)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
23. To what degree have you acquired the following skills: (cont'd)						
ii. finding first derivative from basic principles?	27.5	27.9	19.8	16.7	8.1	3.50 (1.28)
jj. finding derivatives of algebraic and trigonometric functions?	24.4	23.6	27.6	19.3	5.1	3.43 (1.20)
kk. finding derivatives of explicit function?	21.3	21.8	36.4	11.3	9.2	3.35 (1.20)
ll. finding derivatives of implicit and complex functions?	19.0	24.4	28.1	19.4	9.1	3.25 (1.23)
mm. solving problems of physics and geometry by use of derivatives?	8.8	24.3	30.1	20.5	16.3	2.89 (1.20)
nn. use of first and second derivatives to find rates of increase and decrease, maxima and minima?	9.7	17.4	30.4	28.5	14.0	2.80 (1.17)
oo. drawing curves?	15.1	32.8	31.9	13.8	6.5	3.36 (1.10)
pp. integration of polynomial functions?	8.4	18.8	35.1	22.3	15.3	2.83 (1.16)
qq. using methods of integration (parts and fractions)?	4.6	10.8	39.5	25.1	20.0	2.55 (1.07)
rr. calculation of areas and volumes?	5.1	26.4	30.1	25.5	13.0	2.85 (1.11)
F. Arabic Language						
24. As you have studied grammar and inference topics:						
a. To what extent did you acquire grammatical skills?	8.5	33.2	32.8	17.0	8.5	3.16 (1.08)
b. To what extent did you acqire language habits?	10.7	34.1	32.1	13.9	9.1	3.23 (1.11)
25. As you have studied critique and eloquence topics:						
a. To what extent was your interest for reading in critique and eloquence excited?	12.4	29.9	28.7	18.7	10.4	3.15 (1.17)
b. To what extent was your literary appreciation sense developed?	10.0	32.5	26.9	18.1	12.4	3.10 (1.18)
26. As you have studied reading topics:						
a. To what extent did they contribute to your grammar and thought resources?	18.3	42.6	25.1	12.4	1.6	3.64 (0.97)
b. To what extent did they contribute to your acquisition of technical and practical styles and attitudes?	10.5	34.3	31.9	16.9	6.5	3.25 (1.06)
27. As you have studied Literary Text topics:						
a. To what extent did they contribute to your developing literary appreciation?	15.9	35.1	29.5	12.7	6.8	3.41 (1.11)
b. To what extent did they help you make sound literary judgements on your readings?	9.3	28.9	36.6	17.5	7.7	3.15 (1.06)
c. To what extent did they help you achieve the skill of criticism?	4.0	24.6	35.1	24.2	12.1	2.84 (1.06)
d. To what extent do you depend on yourself in analyzing some literary texts?	8.6	29.8	30.6	20.8	10.2	3.06 (1.12)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
G: Islamic Education						
28. To what extent are the practical performances of Islamic Liturgy:						
a. an integrated part in Islamic Education?	41.7	35.3	11.1	8.3	3.6	4.03 (1.09)
b. a basic part in method teaching of Islamic Education?	31.1	34.3	25.1	6.0	3.6	3.83 (1.05)
29. The six aspects of the Islamic Education curriculum are: The Quran, The Hadith, Belief (A'keedah) Worship, The Prophet's Biography, and Islamic Systems. To what degree do you feel that some degree of continuity and integration was realized among these aspects as a result of the way the curriculum treated these aspects?	27.1	47.0	17.1	5.6	3.2	3.89 (0.97)
30. To what extent does the Islamic Education subject matter emphasize the historical aspects of Islam?	35.3	37.7	20.2	4.0	2.8	3.99 (0.98)
31. To what extent does the Islamic Education subject-matter help you develop basic attitudes and skills of logical thinking namely:						
a. deductive thinking: application of general principles on special cases?	23.6	36.0	30.0	6.8	3.6	3.69 (1.02)
b. inductive thinking: arriving at a general principle or rule from special cases?	17.2	36.4	29.3	10.5	6.7	3.47 (1.10)
32. To what extent do the Islamic Education Subject-matter encourage you to read extracurricularly Islamic reference and major books?	25.6	37.6	20.8	13.2	2.8	3.70 (1.08)
33. The Islamic Education Curriculum for Secondary Level is constituted as six separate lessons corresponding to six aspects of Islamic Education. To what degree do you see the separate lesson method as actualizing the intended integration of these aspects?	14.5	41.1	29.4	8.9	6.0	3.49 (1.04)
34. The Islamic Education Curriculum aims at achieving at the Secondary Levels certain objectives. To what extent were the following objectives realized:						
a. completing the building of an integrated Islamic personality by considering all developmental domains namely: physical, spiritual, cognitive and behaviour?	29.6	43.2	17.6	6.8	2.8	3.90 (1.00)
b. developing and stabilizing loyalty to GOD, belonging to the Islamic nation, and pride in Islam as belief and as system of life?	59.2	24.8	12.0	2.4	1.6	4.38 (0.90)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
34. The Islamic Education Curriculum aims at achieving at the Secondary Levels certain objectives. To what extent were the following objectives realized: (cont'd)						
c. reinforcing behaviour based on commitment to Islamic teachings and refuting non-Islamic principles and teachings for individual and group behaviour?	39.3	38.5	16.6	2.8	2.8	4.09 (0.96)
d. developing positive attitudes based on Islamic teahings that will help a Muslim confront contemporary challenges?	32.5	37.8	21.7	5.2	2.8	3.92 (1.00)
e. identify Islamic systems that warn against disadvantages of man-made systems so as to be able to confront challenges of non-Islamic intellectual and cultural invasion to which a Muslim may be exposed to in contemporary life?	39.0	36.1	17.7	4.4	2.8	4.04 (1.00)
H. Contemporary Issues						
35. Contemporary Issues Course contains a group of current problems transmitted to us by the mass media and issues. To what extent have you understood these problems and their social, local, national, and international effects:						
a. cultural selectionism?	13.9	35.5	33.9	10.8	6.0	3.41 (1.05)
b. economic inflation?	19.8	38.9	23.8	13.5	4.0	3.57 (1.07)
c. economic regression?	20.7	36.7	25.9	12.4	4.4	3.57 (1.08)
d. immigration?	42.3	27.8	20.6	7.3	2.0	4.01 (1.05)
e. problems of development?	27.6	34.8	23.2	8.8	5.6	3.70 (1.13)
f. desert and sahara creeping?	34.8	33.6	18.8	8.8	4.0	3.86 (1.11)
g. depletion of natural resources?	40.5	28.7	20.2	6.1	4.5	3.95 (1.12)
h. nutritional security?	17.0	34.1	27.1	14.8	7.0	3.39 (1.14)
i. transportation?	15.8	33.5	31.2	9.0	10.4	3.35 (1.17)
j. disposal of waste products?	26.5	30.1	23.5	12.4	7.5	3.56 (1.22)
k. soil problems?	33.8	30.0	20.3	8.4	7.6	3.74 (1.22)
36. To what degree do you feel that studying these problems contributed to formation of positive attitudes in such a way that will help you contribute to reducing their dangers and their effects at local, national and international levels?	17.2	42.7	22.6	11.3	6.3	3.53 (1.10)
I. English						
37. To what extent do you feel that the English Language curriculum realized the following objectives:						
a. enriched your knowledge about the outside world?	6.5	26.9	29.6	19.2	17.7	2.85 (1.19)
b. provided you with basic English language skills that enable you to express yourself in written and oral English with foreign nationals in and outside of Oman?	6.6	19.3	23.6	27.4	23.2	2.59 (1.22)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
37. To what extent do you feel that the English Language curriculum realized the following objectives: (cont'd)						
c. enabled you to use English effectively and creatively in both casual and formal situations?	5.0	14.0	27.5	27.9	25.6	2.45 (1.16)
d. encouraged you to read books, journals and magazines in English outside the curriculum?	6.9	17.4	24.3	26.6	24.7	2.55 (1.23)
38. To what extent does the English language curriculum content provide you with exercises and drills enabling you to master the following basi skills:						
a. listening?	8.6	26.5	26.8	22.6	15.6	2.90 (1.20)
b. speaking?	7.4	25.0	32.0	20.7	14.8	2.90 (1.16)
c. reading?	12.8	33.1	28.8	16.3	8.9	3.25 (1.15)
d. writing?	12.6	28.5	26.9	16.2	15.8	3.06 (1.26)
e. comprehension?	15.7	25.2	23.2	19.7	16.1	3.05 (1.32)
39. To what extent does the English Language curriculum emphasize the following:						
a. silent reading speed and comprehension?	9.3	30.4	26.1	23.7	10.5	3.04 (1.16)
b. reading aloud with fluency and precise pronunciation?	9.1	23.8	28.6	21.8	16.7	2.87 (1.22)
40. To what extent were English language cassettes useful to you in regard to:						
a. providing good pronunciation model?	7.8	24.8	25.2	20.2	22.1	2.76 (1.26)
b. promoting and practicing listening comprehension?	6.2	21.8	26.1	21.8	24.1	2.64 (1.24)
c. presenting difficult materials such as dialogs and songs?	14.1	20.3	23.4	21.9	20.3	2.86 (1.34)
41. To what extent were the "Reading for Information Texts" useful to you in regard to:						
a. simulating essays and stories from newspapers or magazines?	6.4	27.9	33.1	17.9	14.7	2.93 (1.14)
b. encouraging your rapid silent reading of quite difficult texts in order to extract the main points and factual information?	7.6	22.4	27.6	24.8	17.6	2.78 (1.20)
42. To what extent was the English Language curriculum successful in enabling you to master the following functional skills:						
a. feeling at ease with the English language so you could give simple instructions and directions in a sequential manner?	5.9	29.1	26.0	20.9	18.1	2.84 (1.20)
b. understand the link of events in the past and accept and acknowledge social invitations in the appropriate tone and form?	4.7	19.3	35.4	20.5	20.1	2.68 (1.14)
c. use proper forms of greeting and congratulatory statements?	16.7	30.6	22.2	19.0	11.5	3.22 (1.26)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
42. To what extent was the English Language curriculum successful in enabling you to master the following functional skills: (cont'd)						
d. describe personal features of people?	12.6	29.6	25.3	22.5	9.9	3.13 (1.19)
43. To what degree does the English Language curriculum content cover specialized vocabulary from the linguistics point of view which would enable you to continue studies at the university level and be able to communicate in respect to:						
a. the personal domain?	5.1	22.7	32.0	24.6	15.6	2.77 (1.12)
b. the social domain?	3.9	23.0	29.7	24.6	18.8	2.69 (1.14)
c. the national domain?	2.0	15.0	37.0	24.8	21.3	2.52 (1.05)
d. the international domain?	3.5	13.8	28.7	30.3	23.6	2.43 (1.10)
e. the scientific domain?	6.3	21.4	29.0	23.4	19.8	2.71 (1.19)
f. the literary and cultural domain?	2.0	13.1	32.4	23.4	29.1	2.36 (1.10)
g. the geo-political domain?	3.0	8.5	25.1	29.4	34.0	2.17 (1.08)
44. To what extent does the English Language Curriculum encourage you to think creatively and independently?	6.2	23.6	27.9	23.6	18.6	2.75 (1.19)
SECTION II: METHODS OF TEACHING						
1. To what degree do you see that the teacher relates subject matter to life situations and practical exercises?	6.5	35.2	32.2	18.0	8.0	3.14 (1.05)
2. To what extent does the teacher employ a variety of approaches appropriate to the nature of the subject matter?	8.2	32.7	34.6	18.3	6.2	3.18 (1.03)
3. To what degree do you feel the teacher employs several methods of teaching appropriate to different students' abilities including the high achievers, average and weak achievers?	14.5	27.7	28.1	18.8	10.9	3.16 (1.21)
4. To what extent does the teacher encourage independent learning approach, e.g. students performance of research, studies and experiments by themselves?	6.9	20.0	29.2	24.6	19.2	2.71 (1.19)
5. To what extent does the teacher employ project or team approach when conducting lessons?	3.5	16.3	30.4	31.1	18.7	2.55 (1.08)
6. To what extent does the teaher employ different instructional media in lesson demonstration?	6.2	29.2	30.4	23.5	10.8	2.97 (1.10)
7. To what extent does the teacher's approaches encourage teacher-pupil interaction and allow students' to express opinions?	15.2	32.7	26.8	18.3	7.0	3.31 (1.14)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
8. From your point-of-view, what degree of integration exists between textbook contents and the teacher's class activities?	7.7	29.7	32.8	20.8	8.9	3.07 (1.08)
9. To what extent do methods of teaching at the Secondary level help you develop the following critical thinking habits and attitudes:						
a. suspending judgement?	12.7	39.4	25.5	18.9	3.5	3.39 (1.04)
b. investigate accuracy of data?	7.7	39.2	29.6	16.5	6.9	3.24 (1.04)
c. evaluating data resources?	6.2	25.2	36.8	21.3	10.5	2.95 (1.07)
d. employing a variety of information resources?	13.4	23.3	29.2	22.1	11.9	3.04 (1.21)
SECTION III: MATERIAL FACILITIES						
1. To what degree do you feel that your Secondary School is an educational environment for the students cognitive development?	17.4	31.7	23.2	16.2	11.6	3.27 (1.25)
2. What is your judgement of classroom facilities from the following perspectives: space, furniture, lighting, ventilation, equipment and apparatus?	15.2	21.8	17.9	19.8	25.3	2.82 (1.42)
3. To what extent was school laboratory useful in the following aspects:						
a. ensuring the comprehension of theoretical concepts you have already studied?	11.5	28.8	27.7	17.7	14.2	3.06 (1.22)
b. acquisition of skillful use and manipulation of laboratory apparatus and materials?	10.4	19.3	25.1	18.9	26.3	2.69 (1.33)
c. schematizing results, drawing graphs, and writing lab-reports?	4.4	22.2	24.2	25.8	23.4	2.58 (1.19)
4. To what extent was school library useful in the following aspects:						
a. identify library reference system and fast location of required references?	7.8	25.7	28.4	20.6	17.5	2.86 (1.21)
b. reading references related to subject-matter?	5.8	23.3	27.9	24.8	18.2	2.74 (1.17)
c. general reading and general culture?	18.7	25.1	26.3	15.1	14.7	3.18 (1.31)
5. To what degree do you feel that instructional media available at your school is adequate and appropriate for the Secondary Level subject-matters?	3.9	23.6	29.5	24.0	18.9	2.70 (1.14)
6. To what extent are the following places and facilities related to different activities sufficient and appropriate:						
a. clubs?	6.4	13.3	22.5	27.3	30.5	2.38 (1.23)
b. fairs?	6.1	19.4	18.2	30.4	25.9	2.49 (1.24)
c. sport stadiums?	8.5	21.1	21.5	25.1	23.9	2.65 (1.28)

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. To what extent are the following places and facilities related to different activities sufficient and appropriate: (cont'd)						
d. theatres?	3.2	8.1	19.8	23.5	45.3	2.00 (1.13)
e. mosque?	36.4	24.5	12.3	10.3	16.6	3.54 (1.48)
SECTION IV: EVALUATION						
1. Evaluation process at the Secondary Level often includes several tests. To what degree do you feel the following tests are appropriate for the Secondary level student:						
a. objective-question tests: true-false, completion, multiple-choice?	41.2	33.5	14.4	7.0	3.9	4.01 (1.09)
b. subjective tests: student is asked to answer in detail?	19.5	36.6	21.8	12.5	9.7	3.44 (1.21)
c. performance tests: laboratory experiments?	13.1	23.0	28.2	19.4	16.3	2.97 (1.27)
2. To what degree do you see that the tests you had at the Secondary level measure the following:						
a. retention of facts?	7.4	35.4	36.6	16.0	4.7	3.25 (0.97)
b. understanding?	14.4	38.4	29.2	14.0	4.0	3.45 (1.03)
c. ability to analyze?	8.9	28.2	39.1	15.7	8.1	3.14 (1.05)
d. ability to apply?	8.4	30.1	35.3	18.1	8.0	3.13 (1.06)
e. problem-solving?	6.8	27.5	34.7	19.1	11.9	2.98 (1.10)
3. To what extent did the teacher depend on:						
a. lesson stage tests?	5.3	36.2	28.9	19.5	10.2	3.07 (1.08)
b. monthly periodic tests?	13.3	26.6	31.9	17.7	10.5	3.15 (1.18)
c. final tests?	14.5	26.7	28.2	17.3	13.3	3.12 (1.24)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Student Arts: Textbook

PART 1: GENERAL DATA

Item	Percent
1. Sex:	
male	67.2
female	32.8
2. Nationality:	
Omani	91.3
Non-Omani	8.7
3. Name of your school district:	
Muscat	3.1
Batinah	10.8
Roustaq	13.1
Dakhiliyah	11.5
Sharqiyah	12.3
Wousta	11.5
Dhahirah	8.5
Janoubiyah	10.8
Musandam	18.5

Student Arts: Textbook

PART II

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Common Subject Matters						
Islamic Education						
1. You have studied the course Islamic Education for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:						
a. To what extent have you been able to cope with the material presented in the textbook?	24.6	29.2	16.2	16.2	13.8	3.35 (1.37)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	19.4	30.2	20.2	16.3	14.0	3.25 (1.32)
c. To what extent does the material presented in the book relate to other subjects you have studied?	21.5	18.5	23.8	25.4	10.8	3.15 (1.31)
d. To what extent does the book show organization and clear presentation of information?	24.2	17.2	17.2	25.8	15.6	3.09 (1.43)
e. To what extent does the book show clarity and gradation of concepts presented?	20.0	23.8	24.6	16.2	15.4	3.17 (1.34)
f. To what extent is the book current information and data presented?	14.0	26.4	27.1	26.4	6.2	3.16 (1.15)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	20.2	20.2	23.3	20.2	16.3	3.08 (1.37)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	14.6	19.5	32.5	18.7	14.6	3.01 (1.25)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	11.9	20.6	16.7	24.6	26.2	2.68 (1.37)
j. To what extent does the book encourage the use of various instructional media?	14.6	19.2	29.2	24.6	12.3	2.99 (1.24)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	29.5	17.8	14.0	21.7	17.1	3.21 (1.49)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	17.4	21.7	20.9	17.4	22.6	2.94 (1.42)
Arabic Language						
2. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Reading and Texts:						
a. To what extent have you been able to cope with the material presented in the textbook?	24.8	24.8	17.1	20.9	12.4	3.29 (1.37)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
2. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Reading and Texts: (cont'd)						
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	13.8	28.5	20.8	26.9	10.0	3.09 (1.23)
c. To what extent does the mateial presented in the book relate to other subjects you have studied?	15.4	21.5	23.1	29.2	10.8	3.02 (1.25)
d. To what extent does the book show organization and clear presentation of information?	13.8	23.1	27.7	15.4	20.0	2.95 (1.32)
e. To what extent does the book show clarity and gradation of concepts presented?	14.1	21.9	27.3	21.9	14.8	2.98 (1.27)
f. To what extent is the book current in information and data presented?	14.7	21.7	24.8	27.1	11.6	3.01 (1.25)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	17.2	21.1	26.6	19.5	15.6	3.05 (1.32)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	12.8	24.0	29.6	18.4	15.2	3.01 (1.25)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	11.0	18.1	27.6	26.8	16.5	2.80 (1.24)
j. To what extent does the book encourage the use of various instructional media?	15.6	21.9	22.7	22.7	17.2	2.96 (1.33)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	15.5	27.1	18.6	20.9	17.8	3.02 (1.35)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	22.2	10.2	24.1	16.7	26.9	2.84 (1.49)
3. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistics Applications (Grammar and Inference):						
a. To what extent have you been able to cope with the material presented in the textbook?	23.1	24.6	17.7	20.0	14.6	3.22 (1.39)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previos grades?	16.9	23.1	28.5	19.2	12.3	3.13 (1.26)
c. To what extent does the material presented in the book relate to other subjects you have studied?	12.4	22.5	28.7	24.8	11.6	2.99 (1.20)
d. To what extent does the book show organization and clear presentation of information?	10.1	28.7	27.9	24.0	9.3	3.06 (1.14)
e. To what extent does the book show clarity and gradation of concepts presented?	14.6	22.3	26.2	17.7	19.2	2.95 (1.33)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
3. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistics Applications (Grammar and Inference): (cont'd)						
f. To what extent is the book current in information and data presented?	13.3	21.1	30.5	23.4	11.7	3.01 (1.21)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	11.8	21.3	33.1	22.0	11.8	2.99 (1.18)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	8.2	27.9	28.7	22.1	13.1	2.96 (1.17)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	13.8	14.6	29.3	25.2	17.1	2.83 (1.27)
j. To what extent does the book encourage the use of various instructional media?	12.5	14.8	30.5	27.3	14.8	2.83 (1.22)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	12.9	21.0	21.8	26.6	17.7	2.85 (1.30)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	18.9	12.3	17.0	22.6	29.2	2.69 (1.48)
4. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistic Applications (Literary Criticism, Rhetoric, and Prosody):						
a. To what extent have you been able to cope with the material presented in the textbook?	17.1	27.1	23.3	24.0	8.5	3.20 (1.23)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previos grades?	14.6	21.5	31.5	24.6	7.7	3.11 (1.16)
c. To what extent does the material presented in the book relate to other subjects you have studied?	8.7	22.8	29.9	29.9	8.7	2.93 (1.11)
d. To what extent does the book show organization and clear presentation of information?	16.4	21.1	18.0	29.7	14.8	2.95 (1.33)
e. To what extent does the book show clarity and gradation of concepts presented?	10.1	25.6	28.7	24.0	11.6	2.98 (1.17)
f. To what extent is the book current in information and data presented?	11.6	24.0	28.7	25.6	10.1	3.02 (1.17)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	11.7	26.6	28.1	24.2	9.4	3.07 (1.17)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	8.5	21.7	37.2	22.5	10.1	2.96 (1.09)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	12.2	17.9	24.4	21.1	24.4	2.72 (1.34)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
4. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistic Applications (Literary Criticism, Rhetoric, and Prosody): (cont'd)						
j. To what extent does the book encourage the use of various instructional media?	10.2	16.4	31.3	28.1	14.1	2.81 (1.18)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	14.6	23.1	18.5	20.0	23.8	2.85 (1.40)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	18.9	11.3	17.9	16.0	35.8	2.61 (1.53)
English Language						
5. You have studied the course English Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook New Age Secondary:						
a. To what extent have you been able to cope with the material presented in the textbook?	29.2	15.0	20.8	17.5	17.5	3.21 (1.47)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previos grades?	20.8	20.0	17.5	27.5	14.2	3.06 (1.37)
c. To what extent does the material presented in the book relate to other subjects you have studied?	18.3	20.8	22.5	21.7	16.7	3.03 (1.36)
d. To what extent does the book show organization and clear presentation of information?	22.7	24.4	18.5	16.8	17.6	3.18 (1.42)
e. To what extent does the book show clarity and gradation of concepts presented?	11.1	26.5	24.8	18.8	18.8	2.92 (1.29)
f. To what extent is the book current in information and data presented?	26.3	22.9	15.3	20.3	15.3	3.25 (1.43)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	15.0	23.0	25.7	23.0	13.3	3.04 (1.27)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	18.6	19.5	26.5	23.0	12.4	3.09 (1.29)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	20.5	15.4	24.8	24.8	14.5	3.03 (1.35)
j. To what extent does the book encourage the use of various instructional media?	20.3	21.2	25.4	25.4	7.6	3.21 (1.25)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	28.2	22.2	16.2	10.3	23.1	3.22 (1.53)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	35.7	16.1	12.5	10.7	25.0	3.27 (1.63)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. You have studied the course English Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook S. Book and Work Book:						
a. To what extent have you been able to cope with the material presented in the textbook?	21.5	24.6	17.7	20.8	15.4	3.16 (1.39)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previos grades?	17.7	23.8	29.2	16.9	12.3	3.18 (1.26)
c. To what extent does the material presented in the book relate to other subjects you have studied?	18.6	19.4	23.3	20.2	18.6	2.99 (1.38)
d. To what extent does the book show organization and clear presentation of information?	22.8	27.6	19.7	22.0	7.9	3.35 (1.27)
e. To what extent does the book show clarity and gradation of concepts presented?	16.5	22.8	32.3	15.0	13.4	3.14 (1.25)
f. To what extent is the book current in information and data presented?	26.0	26.0	22.8	13.4	11.8	3.41 (1.32)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	24.0	20.9	24.0	20.9	10.1	3.28 (1.31)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	22.2	20.6	22.2	20.6	14.3	3.16 (1.37)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	16.4	25.4	23.8	16.4	18.0	3.06 (1.34)
j. To what extent does the book encourage the use of various instructional media?	17.1	18.7	26.8	22.8	14.6	3.01 (1.30)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	31.0	22.5	10.1	18.6	17.8	3.30 (1.51)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	38.8	11.6	14.0	13.2	22.3	3.31 (1.62)
Subject Matter Literary Section						
History of Arabic Literature						
1. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook History of Arabic Literature:						
a. To what extent have you been able to cope with the material presented in the textbook?	18.6	20.9	22.5	20.9	17.1	3.03 (1.36)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previos grades?	15.5	23.3	24.8	25.6	10.9	3.07 (1.25)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook History of Arabic Literature: (cont'd)						
c. To what extent does the material presented in the book relate to other subjects you have studied?	14.1	21.9	28.1	24.2	11.7	3.02 (1.23)
d. To what extent does the book show organization and clear presentation of information?	11.7	18.0	26.6	31.3	12.5	2.85 (1.20)
e. To what extent does the book show clarity and gradation of concepts presented?	11.7	14.8	29.7	27.3	16.4	2.78 (1.23)
f. To what extent is the book current in information and data presented?	11.8	24.4	29.9	20.5	13.4	3.01 (1.21)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	10.2	19.7	30.7	25.2	14.2	2.87 (1.19)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	8.1	18.7	35.0	23.6	14.6	2.82 (1.15)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	11.9	17.8	28.0	30.5	11.9	2.87 (1.20)
j. To what extent does the book encourage the use of various instructional media?	9.1	22.3	33.9	24.0	10.7	2.95 (1.12)
K. To what extent does the book show appropriateness in shape, volume, and quality of print?	21.3	17.3	26.8	13.4	21.3	3.04 (1.42)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	21.9	15.2	9.5	22.9	30.5	2.75 (1.56)
Social Studies						
2. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Regional Geography:						
a. To what extent have you been able to cope with the material presented in the textbook?	16.3	23.3	20.9	22.5	17.1	2.99 (1.34)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	10.9	25.6	20.9	30.2	12.4	2.92 (1.22)
c. To what extent does the material presented in the book relate to other subjects you have studied?	11.7	18.0	35.9	23.4	10.9	2.96 (1.15)
d. To what extent does the book show organization and clear presentation of information?	10.9	20.9	25.6	27.9	14.7	2.85 (1.23)
e. To what extent does the book show clarity and gradation of concepts presented?	8.6	21.1	30.5	28.9	10.9	2.88 (1.13)
f. To what extent is the book current in information and data presented?	13.3	25.0	32.0	14.1	15.6	3.06 (1.25)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
2. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Regional Geography: (cont'd)						
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	11.0	18.1	29.9	30.7	10.2	2.89 (1.16)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	10.3	16.7	31.7	29.4	11.9	2.84 (1.16)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	19.5	16.3	20.3	21.1	22.8	2.89 (1.44)
j. To what extent does the book encourage the use of various instructional media?	14.2	22.0	26.0	24.4	13.4	2.99 (1.26)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	17.1	14.0	21.7	18.6	28.7	2.72 (1.45)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	14.3	24.6	19.0	20.6	21.4	2.90 (1.37)
3. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook History of Oman and the Arab Gulf:						
a. To what extent have you been able to cope with the material presented in the textbook?	16.3	30.2	17.8	19.4	16.3	3.11 (1.34)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	11.7	27.3	22.7	27.3	10.9	3.02 (1.21)
c. To what extent does the material presented in the book relate to other subjects you have studied?	14.0	26.4	30.2	20.2	9.3	3.16 (1.18)
d. To what extent does the book show organization and clear presentation of information?	10.2	32.0	24.2	18.0	15.6	3.03 (1.24)
e. To what extent does the book show clarity and gradation of concepts presented?	12.4	27.1	24.8	24.0	11.6	3.05 (1.22)
f. To what extent is the book current in information and data presented?	13.3	25.0	29.7	24.2	7.8	3.12 (1.15)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	9.4	27.6	28.3	25.2	9.4	3.02 (1.14)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	9.7	24.2	29.0	28.2	8.9	2.98 (1.13)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	9.8	22.0	36.6	18.7	13.0	2.97 (1.15)
j. To what extent does the book encourage the use of various instructional media?	12.6	28.3	26.8	21.3	11.0	3.10 (1.20)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
3. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook History of Oman and the Arab Gulf: (cont'd)						
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	16.7	20.8	20.0	20.8	21.7	2.90 (1.40)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	19.2	14.4	32.0	15.2	19.2	2.99 (1.36)
4. You have studied the course Civic Education for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:						
a. To what extent have you been able to cope with the material presented in the textbook?	14.0	22.5	31.8	19.4	12.4	3.06 (1.22)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	7.8	23.3	32.6	24.0	12.4	2.90 (1.13)
c. To what extent does the material presented in the book relate to other subjects you have studied?	7.9	19.7	32.3	26.0	14.2	2.81 (1.15)
d. To what extent does the book show organization and clear presentation of information?	10.2	20.3	38.3	20.3	10.9	2.98 (1.12)
e. To what extent does the book show clarity and gradation of concepts presented?	10.9	19.4	33.3	29.5	7.0	2.98 (1.10)
f. To what extent is the book current in information and data presented?	11.2	28.8	28.8	20.8	10.4	3.10 (1.17)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	12.5	23.4	30.5	24.2	9.4	3.06 (1.17)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	7.1	21.4	33.3	24.6	13.5	2.84 (1.13)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	10.5	23.4	20.2	23.4	22.6	2.76 (1.32)
j. To what extent does the book encourage the use of various instructional media?	7.1	21.4	32.5	23.0	15.9	2.81 (1.16)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	20.5	17.3	26.0	21.3	15.0	3.07 (1.35)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	15.2	12.8	29.6	20.8	21.6	2.79 (1.33)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. You have studied the course Social Studies for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Human Sagacity (Culture):						
a. To what extent have you been able to cope with the material presented in the textbook?	17.2	21.1	20.3	25.8	15.6	2.98 (1.34)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	6.2	22.5	27.9	28.7	14.7	2.77 (1.14)
c. To what extent does the material presented in the book relate to other subjects you have studied?	8.7	15.7	32.3	33.1	10.2	2.80 (1.10)
d. To what extent does the book show organization and clear presentation of information?	7.0	20.3	36.7	21.9	14.1	2.84 (1.12)
e. To what extent does the book show clarity and gradation of concepts presented?	7.0	23.4	32.8	25.8	10.9	2.90 (1.10)
f. To what extent is the book current in information and data presented?	7.8	21.1	40.6	19.5	10.9	2.95 (1.08)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	4.8	19.4	33.1	28.2	14.5	2.72 (1.09)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	5.6	25.8	26.6	28.2	13.7	2.82 (1.14)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	7.3	15.4	34.1	25.2	17.9	2.69 (1.15)
j. To what extent does the book encourage the use of various instructional media?	9.6	20.8	25.6	29.6	14.4	2.82 (1.20)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	20.0	16.0	29.6	18.4	16.0	3.06 (1.34)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	11.8	19.3	26.9	21.0	21.0	2.80 (1.30)
General Science						
6. You have studied the course General Science for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook General Science:						
a. To what extent have you been able to cope with the material presented in the textbook?	27.1	23.3	17.1	20.2	12.4	3.33 (1.39)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	14.7	22.5	33.3	20.9	8.5	3.14 (1.16)
c. To what extent does the material presented in the book relate to other subjects you have studied?	11.6	26.4	31.8	24.8	5.4	3.14 (1.09)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. You have studied the course General Science for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook General Science: (cont'd)						
d. To what extent does the book show organization and clear presentation of information?	19.4	23.3	29.5	17.8	10.1	3.24 (1.24)
e. To what extent does the book show clarity and gradation of concepts presented?	10.9	27.1	31.8	25.6	4.7	3.14 (1.07)
f. To what extent is the book current in information and data presented?	17.2	20.3	37.5	18.0	7.0	3.23 (1.15)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	13.3	25.0	25.0	22.7	14.1	3.01 (1.26)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	10.9	26.4	29.5	19.4	14.0	3.01 (1.21)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	14.8	17.2	28.9	24.2	14.8	2.93 (1.27)
j. To what extent does the book encourage the use of various instructional media?	14.3	16.7	37.3	23.8	7.9	3.06 (1.14)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	16.4	21.1	30.5	17.2	14.8	3.07 (1.28)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	13.2	21.5	28.1	21.5	15.7	2.95 (1.26)
Mathematics						
7. You have studied the course Mathematics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Mathematics for Grade 3 Secondary (Literary Section):						
a. To what extent have you been able to cope with the material presented in the textbook?	17.8	17.8	19.4	27.9	17.1	2.92 (1.36)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	10.9	19.4	25.6	29.5	14.7	2.82 (1.22)
c. To what extent does the material presented in the book relate to other subjects you have studied?	14.8	11.7	20.3	29.7	23.4	2.65 (1.36)
d. To what extent does the book show organization and clear presentation of information?	14.8	14.8	28.9	25.8	15.6	2.88 (1.27)
e. To what extent does the book show clarity and gradation of concepts presented?	11.8	22.8	25.2	26.8	13.4	2.93 (1.23)
f. To what extent is the book current in information and data presented?	15.5	22.5	20.2	23.3	18.6	2.93 (1.35)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
7. You have studied the course Mathematics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Mathematics for Grade 3 Secondary (Literary Section): (cont'd)						
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	17.3	18.1	18.1	26.8	19.7	2.87 (1.39)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	14.3	22.2	18.3	23.8	21.4	2.84 (1.37)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	16.5	17.4	15.7	24.0	26.4	2.74 (1.44)
j. To what extent does the book encourage the use of various instructional media?	12.5	20.3	20.3	24.2	22.7	2.76 (1.34)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	17.8	17.1	25.6	19.4	20.2	2.93 (1.38)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	16.7	11.7	20.8	20.0	30.8	2.63 (1.45)

Student Sciences: Textbook

PART 1: GENERAL DATA

Item	Percent
1. Sex:	
male	62.1
female	37.9
2. Nationality:	
Omani	94.3
Non-Omani	5.7
3. Name of your school district:	
Muscat	12.9
Batinah	8.9
Roustaq	10.5
Dakhiliyah	12.1
Sharqiyah	11.3
Wousta	12.1
Dhahirah	15.3
Janoubiyah	12.9
Musandam	4.0

Student Sciences: Textbook

PART II

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Common Subject Matters						
Islamic Education						
1. You have studied the course Islamic Education for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:						
a. To what extent have you been able to cope with the material presented in the textbook?	30.6	31.5	13.7	16.1	8.1	3.61 (1.29)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	20.2	38.7	19.4	16.1	5.6	3.52 (1.15)
c. To what extent does the material presented in the book relate to other subjects you have studied?	16.3	26.8	23.6	22.8	10.6	3.15 (1.25)
d. To what extent does the book show organization and clear presentation of information?	13.7	39.5	21.8	18.5	6.5	3.36 (1.13)
e. To what extent does the book show clarity and gradation of concepts presented?	20.5	24.6	28.7	18.0	8.2	3.31 (1.22)
f. To what extent is the book current information and data presented?	12.5	34.2	22.5	22.5	8.3	3.20 (1.17)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	10.7	26.4	38.8	15.7	8.3	3.16 (1.08)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	17.5	23.3	32.5	19.2	7.5	3.24 (1.17)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	12.5	19.2	29.2	18.3	20.8	2.84 (1.30)
j. To what extent does the book encourage the use of various instructional media?	15.7	20.7	33.1	20.7	9.9	3.12 (1.20)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	29.2	22.5	20.8	15.8	11.7	3.42 (1.36)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	15.1	7.5	28.3	14.2	34.9	2.54 (1.42)
Arabic Language						
2. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Reading and Texts:						
a. To what extent have you been able to cope with the material presented in the textbook?	19.4	34.7	20.2	18.5	7.3	3.40 (1.20)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
2. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook, Reading and Texts: (cont'd)						
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	16.3	28.5	32.5	18.7	4.1	3.34 (1.09)
c. To what extent does the mateial presented in the book relate to other subjects you have studied?	7.3	26.0	37.4	23.6	5.7	3.06 (1.01)
d. To what extent does the book show organization and clear presentation of information?	17.9	31.7	22.8	24.4	3.3	3.37 (1.13)
e. To what extent does the book show clarity and gradation of concepts presented?	8.1	27.6	42.3	15.4	6.5	3.15 (1.00)
f. To what extent is the book current in information and data presented?	10.7	33.9	27.3	22.3	5.8	3.22 (1.09)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	24.0	21.5	25.6	15.7	13.2	3.27 (1.34)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	15.7	19.8	29.8	23.1	11.6	3.05 (1.24)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	13.7	14.5	23.1	23.1	25.6	2.68 (1.36)
j. To what extent does the book encourage the use of various instructional media?	11.8	24.4	30.3	20.2	13.4	3.01 (1.21)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	19.0	29.8	22.3	19.8	9.1	3.30 (1.24)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	13.5	12.6	21.6	22.5	29.7	2.58 (1.39)
3. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistics Applications (Grammar and Inference)?						
a. To what extent have you been able to cope with the material presented in the textbook?	19.5	26.8	22.8	22.0	8.9	3.26 (1.25)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	12.2	34.1	19.5	26.8	7.3	3.17 (1.17)
c. To what extent does the material presented in the book relate to other subjects you have studied?	6.6	16.4	34.4	29.5	13.1	2.74 (1.09)
d. To what extent does the book show organization and clear presentation of information?	15.6	19.7	32.8	23.0	9.0	3.10 (1.19)
e. To what extent does the book show clarity and gradation of concepts presented?	19.7	23.8	27.0	25.4	4.1	3.30 (1.17)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
3. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistics Applications (Grammar and Inference): (cont'd)						
f. To what extent is the book current in information and data presented?	8.9	32.5	30.1	22.0	6.5	3.15 (1.07)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	19.0	18.2	34.7	14.9	13.2	3.15 (1.27)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	11.9	24.6	34.7	16.9	11.9	3.08 (1.17)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	11.3	13.9	31.3	21.7	21.7	2.71 (1.27)
j. To what extent does the book encourage the use of various instructional media?	10.8	17.5	34.2	17.5	20.0	2.82 (1.25)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	17.1	30.8	23.1	21.4	7.7	3.28 (1.20)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	18.3	12.8	21.1	15.6	32.1	2.70 (1.49)
4. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistic Applications (Literary Criticism, Rhetoric, and Prosody):						
a. To what extent have you been able to cope with the material presented in the textbook?	12.2	35.8	17.9	26.0	8.1	3.18 (1.19)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	7.4	27.0	32.0	26.2	7.4	3.01 (1.06)
c. To what extent does the material presented in the book relate to other subjects you have studied?	7.4	22.1	34.4	25.4	10.7	2.90 (1.09)
d. To what extent does the book show organization and clear presentation of information?	13.9	28.7	27.9	21.3	8.2	3.19 (1.17)
e. To what extent does the book show clarity and gradation of concepts presented?	14.8	23.0	28.7	24.6	9.0	3.10 (1.20)
f. To what extent is the book current in information and data presented?	11.0	28.0	27.1	20.3	13.6	3.03 (1.22)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	13.1	16.4	34.4	22.1	13.9	2.93 (1.21)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	9.2	20.0	35.8	22.5	12.5	2.91 (1.14)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	11.9	11.9	26.3	22.0	28.0	2.58 (1.33)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
4. You have studied the course Arabic Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Linguistic Applications (Literary Criticism, Rhetoric, and Prosody): (cont'd)						
j. To what extent does the book encourage the use of various instructional media?	12.4	18.2	22.3	24.0	23.1	2.73 (1.34)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	13.1	27.0	27.0	22.1	10.7	3.10 (1.20)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	14.7	8.3	21.1	21.1	34.9	2.47 (1.42)
English Language						
5. You have studied the course English Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook New Age Secondary:						
a. To what extent have you been able to cope with the material presented in the textbook?	12.5	20.0	27.5	25.8	14.2	2.91 (1.24)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	8.5	21.4	27.4	29.1	13.7	2.82 (1.17)
c. To what extent does the material presented in the book relate to other subjects you have studied?	9.2	22.7	29.4	26.1	12.6	2.90 (1.17)
d. To what extent does the book show organization and clear presentation of information?	14.3	21.0	36.1	19.3	9.2	3.12 (1.16)
e. To what extent does the book show clarity and gradation of concepts presented?	6.7	23.3	30.0	30.8	9.2	2.88 (1.08)
f. To what extent is the book current in information and data presented?	21.0	26.9	18.5	20.2	13.4	3.22 (1.35)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	10.2	30.5	30.5	20.3	8.5	3.14 (1.12)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	6.1	31.3	30.4	20.9	11.3	3.00 (1.11)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	3.5	18.3	30.4	28.7	19.1	2.58 (1.10)
j. To what extent does the book encourage the use of various instructional media?	6.0	24.8	24.8	25.6	18.8	2.74 (1.20)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	19.3	25.2	16.8	22.7	16.0	3.09 (1.38)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	24.6	22.9	13.6	15.3	23.7	3.09 (1.53)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. You have studied the course English Language for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook S. Book and Work Book:						
a. To what extent have you been able to cope with the material presented in the textbook?	9.9	31.4	24.8	26.4	7.4	3.10 (1.13)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	4.9	28.7	33.6	21.3	11.5	2.94 (1.08)
c. To what extent does the material presented in the book relate to other subjects you have studied?	9.8	15.6	32.8	27.9	13.9	2.80 (1.16)
d. To what extent does the book show organization and clear presentation of information?	9.8	28.7	23.8	23.8	13.9	2.97 (1.22)
e. To what extent does the book show clarity and gradation of concepts presented?	6.6	27.0	30.3	26.2	9.8	2.94 (1.09)
f. To what extent is the book current in information and data presented?	15.0	28.3	23.3	22.5	10.8	3.14 (1.24)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	16.5	19.0	31.4	23.1	9.9	3.09 (1.22)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	6.8	25.4	35.6	20.3	11.9	2.95 (1.10)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	6.8	18.8	27.4	28.2	18.8	2.67 (1.18)
j. To what extent does the book encourage the use of various instructional media?	9.2	21.0	32.8	16.8	20.2	2.82 (1.24)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	22.3	24.8	14.0	16.5	22.3	3.08 (1.49)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	22.0	23.7	11.9	19.5	22.9	3.03 (1.50)
Subject Matter Science Section						
Chemistry						
1. You have studied the course of Chemistry for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:						
a. To what extent have you been able to cope with the material presented in the textbook?	11.3	36.3	25.8	16.9	9.7	3.23 (1.15)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	12.9	30.6	31.5	16.9	8.1	3.23 (1.13)
c. To what extent does the material presented in the book relate to other subjects you have studied?	10.5	32.3	25.0	25.0	7.3	3.14 (1.13)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
1. You have studied the course of Chemistry for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook: (cont'd)						
d. To what extent does the book show organization and clear presentation of information?	16.9	23.4	29.0	21.8	8.9	3.18 (1.21)
e. To what extent does the book show clarity and gradation of concepts presented?	12.1	25.8	29.8	17.7	14.5	3.03 (1.23)
f. To what extent is the book current in information and data presented?	14.6	25.2	26.8	20.3	13.0	3.08 (1.25)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	18.9	25.4	31.1	14.8	9.8	3.29 (1.22)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	16.4	27.9	32.0	14.8	9.0	3.28 (1.17)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	14.6	26.8	22.0	19.5	17.1	3.02 (1.32)
j. To what extent does the book encourage the use of various instructional media?	8.1	30.6	30.6	17.7	12.9	3.03 (1.15)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	11.5	21.3	18.9	23.8	24.6	2.71 (1.35)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	6.8	30.5	28.0	22.9	11.9	2.98 (1.14)
Physics						
2. You have studied the course of Physics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:						
a. To what extent have you been able to cope with the material presented in the textbook?	9.0	26.2	27.9	24.6	12.3	2.95 (1.17)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	8.1	24.2	30.6	26.6	10.5	2.93 (1.12)
c. To what extent does the material presented in the book relate to other subjects you have studied?	7.3	26.6	29.0	25.0	12.1	2.92 (1.14)
d. To what extent does the book show organization and clear presentation of information?	6.5	24.2	37.1	24.2	8.1	2.97 (1.04)
e. To what extent does the book show clarity and gradation of concepts presented?	10.7	25.4	27.9	25.4	10.7	3.00 (1.17)
f. To what extent is the book current in information and data presented?	12.9	25.0	28.2	19.4	14.5	3.02 (1.25)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	10.6	25.2	24.4	29.3	10.6	2.96 (1.18)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	13.8	22.0	29.3	17.1	17.9	2.97 (1.29)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
2. You have studied the course of Physics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook: (cont'd)						
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	7.3	23.6	24.4	25.2	19.5	2.74 (1.23)
j. To what extent does the book encourage the use of various instructional media?	5.8	19.8	38.8	19.0	16.5	2.79 (1.12)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	14.9	15.7	19.8	22.3	27.3	2.69 (1.41)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	5.0	30.0	23.3	26.7	15.0	2.83 (1.16)
Biology						
3. You have studied the course of Biology for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Biology:						
a. To what extent have you been able to cope with the material presented in the textbook?	35.5	29.0	9.7	15.3	10.5	3.64 (1.38)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	22.6	31.5	25.0	11.3	9.7	3.46 (1.23)
c. To what extent does the material presented in the book relate to other subjects you have studied?	12.9	33.9	28.2	22.6	2.4	3.32 (1.04)
d. To what extent does the book show organization and clear presentation of information?	28.2	27.4	23.4	11.3	9.7	3.53 (1.28)
e. To what extent does the book show clarity and gradation of concepts presented?	23.6	38.2	17.1	13.0	8.1	3.56 (1.22)
f. To what extent is the book current in information and data presented?	22.0	30.1	25.2	15.4	7.3	3.44 (1.20)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	17.7	26.6	29.8	15.3	10.5	3.26 (1.22)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	17.2	30.3	24.6	18.9	9.0	3.28 (1.22)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	13.8	30.1	22.0	17.9	16.3	3.07 (1.30)
j. To what extent does the book encourage the use of various instructional media?	13.0	27.6	31.7	17.9	9.8	3.16 (1.16)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	30.1	29.3	17.1	13.8	9.8	3.56 (1.31)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	26.4	26.4	20.7	14.9	11.6	3.41 (1.33)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Mathematics						
4. You have studied the course of Mathematics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook Mathematics for Grade 3 Secondary Science:						
a. To what extent have you been able to cope with the material presented in the textbook?	13.0	48.8	15.4	16.3	6.5	3.46 (1.11)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	4.9	32.5	31.7	27.6	3.3	3.08 (0.96)
c. To what extent does the material presented in the book relate to other subjects you have studied?	12.9	19.4	32.3	29.0	6.5	3.03 (1.13)
d. To what extent does the book show organization and clear presentation of information?	11.4	26.0	30.1	26.0	6.5	3.10 (1.11)
e. To what extent does the book show clarity and gradation of concepts presented?	8.2	32.0	28.7	24.6	6.6	3.11 (1.07)
f. To what extent is the book current in information and data presented?	17.9	27.6	24.4	13.8	16.3	3.17 (1.33)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	15.4	39.0	12.2	19.5	13.8	3.23 (1.31)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	17.1	39.8	19.5	14.6	8.9	3.42 (1.19)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	11.7	19.2	24.2	21.7	23.3	2.74 (1.33)
j. To what extent does the book encourage the use of various instructional media?	5.7	23.6	26.0	23.6	21.1	2.69 (1.21)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	14.6	24.4	32.5	17.9	10.6	3.15 (1.19)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	12.5	25.8	26.7	25.0	10.0	3.06 (1.19)
5. You have studied the course of Integration, probability and statistics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook:						
a. To what extent have you been able to cope with the material presented in the textbook?	14.6	35.8	22.0	20.3	7.3	3.30 (1.17)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	8.2	23.8	35.2	25.4	7.4	3.00 (1.06)
c. To what extent does the material presented in the book relate to other subjects you have studied?	6.6	17.4	42.1	28.1	5.8	2.91 (0.98)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
5. You have studied the course of Integration, probability and statistics for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook: (cont'd)						
d. To what extent does the book show organization and clear presentation of information?	8.2	25.4	36.9	24.6	4.9	3.07 (1.01)
e. To what extent does the book show clarity and gradation of concepts presented?	9.8	36.1	26.2	23.8	4.1	3.24 (1.05)
f. To what extent is the book current in information and data presented?	11.9	30.5	30.5	17.8	9.3	3.18 (1.15)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	19.0	31.4	22.3	19.8	7.4	3.35 (1.21)
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	18.6	28.8	28.8	13.6	10.2	3.32 (1.22)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	9.4	15.4	28.2	29.9	17.1	2.70 (1.20)
j. To what extent does the book encourage the use of various instructional media?	11.1	17.9	32.5	17.1	21.4	2.80 (1.28)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	17.5	29.2	23.3	20.0	10.0	3.24 (1.24)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	18.5	20.2	26.1	22.7	12.6	3.09 (1.30)
Contemporary Problems						
6. You have studied the course of Contemporary Problems for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook of Contemporary Problems:						
a. To what extent have you been able to cope with the material presented in the textbook?	28.5	26.0	18.7	17.9	8.9	3.47 (1.31)
b. To what extent does the book show sequence and gradation with this subject's textbooks you have studied in the previous grades?	9.8	32.5	31.7	16.3	9.8	3.16 (1.12)
c. To what extent does the material presented in the book relate to other subjects you have studied?	9.0	23.0	34.4	23.8	9.8	2.98 (1.11)
d. To what extent does the book show organization and clear presentation of information?	13.0	32.5	28.5	16.3	9.8	3.23 (1.17)
e. To what extent does the book show clarity and gradation of concepts presented?	14.6	30.9	23.6	22.0	8.9	3.20 (1.20)
f. To what extent is the book current in information and data presented?	14.6	35.8	26.8	14.6	8.1	3.34 (1.14)
g. To what extent does the book illustrate adequacy, variety, and appropriateness of learning presented?	11.4	25.2	26.8	23.6	13.0	2.98 (1.22)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

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Item	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. You have studied the course of Contemporary Problems for Grade 3 Secondary; to what degree do you agree that the following aspects were satisfactorily treated by the textbook of Contemporary Problems: (cont'd)						
h. To what extent does the book illustrate adequacy, variety, and appropriateness of exercises and questions presented?	4.9	26.8	36.6	18.7	13.0	2.92 (1.08)
i. To what extent were you able to practice educational activities and practical exercises presented in the book?	8.4	15.1	26.9	23.5	26.1	2.56 (1.26)
j. To what extent does the book encourage the use of various instructional media?	9.9	20.7	30.6	19.8	19.0	2.83 (1.24)
k. To what extent does the book show appropriateness in shape, volume, and quality of print?	37.4	19.5	14.6	11.4	17.1	3.49 (1.51)
l. To what extent does the book show clarity and appropriateness of topics in the figures, pictures, charts, and maps presented?	17.1	32.5	21.1	14.6	14.6	3.23 (1.31)

* Response Key: 5 = Fully; 4 = Greatly; 3 = Sometimes; 2 = Seldom; and 1 = Rarely

Part I
Graduate Information: General Data

Item I grad	Percent Response
1. Sex:	
male	72.7
female	27.3
2. Nationality:	
Omani	97.3
Non-Omani	2.7
3. Educational district from which you graduated secondary school?	
Muscat	27.5
Batinah	21.1
Roustaq	9.2
Dakhiliyah	13.8
Sharqiyah	10.1
Wousta	4.6
Dhahirah	10.1
Janoubiyah	1.8
Musandam	1.8
4. What is the year in which you took the General Secondary School Examination:	
1987	66.7
1986	31.4
1985	1.9
1984	0.0
1983	0.0

Item I grad	Percent Response
5. What is the college or institute in which you are presently enrolled:	
College of Education and Islamic Studies	20.2
College of Science	0.0
College of Medicine	0.0
College of Engineering	36.7
College of Agriculture	0.0
Junior College for Teachers	17.4
Omani Technical Junior College	0.0
Other institutions	25.7
6. What is your present occupation:	
Clerical Work	68.9
Engineering or Technical Work	15.5
Administration	15.5
Financial Affairs	0.0
Other	0.0

Part II
Graduate Information

Item II grad	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
Section I: Curriculum and Subject-Matter						
1. To what degree do you feel that the subject-matters you studied at the secondary level formed integrated and interrelated body of knowledge?	12.0	45.4	33.3	8.3	0.9	3.59 (0.84)
2. From your point of view, did these subject-matters treat the local environment in such a way that you understand the needs of environment conservation and perservation and methods of meeting these needs?	17.3	24.5	27.3	20.9	10.0	3.18 (1.24)
3. To what extent do you believe that the subject-matters helped you acquire the following basic skills:						
a. cognitive skills?	23.9	42.2	24.8	6.4	2.8	3.78 (0.98)
b. social skills?	12.4	23.8	39.0	20.0	4.8	3.19 (1.05)
c. psycho-motor skills?	5.7	7.6	16.2	30.5	40.0	2.09 (1.18)
4. To what degree do you feel that the curriculum helped you to understand the scientific and technical developments of the present age?	13.3	27.6	39.0	12.4	7.6	3.27 (1.09)
5. To what extent do you believe that your studies at the secondary level helped you to discover, develop, and refine your talents?	27.3	23.6	28.2	16.4	4.5	3.53 (1.19)
6. To what extent do you agree the subject-matters you learned at the secondary level assisted you in your higher education studies?	13.2	25.5	33.0	18.9	9.4	3.14 (1.16)
7. To what extent do you agree that the subjects you studied at the secondary level contributed to preparing you for your present occupation?	20.6	34.6	19.6	13.1	12.1	3.38 (1.29)
8. To what degree do you believe that these subjects reflected a balance between concepts, skills, social aspects, attitudes, and values?	11.5	26.0	35.6	16.3	10.6	3.12 (1.14)
9. To what degree do you feel that teaching methods of these subject-matters helped and guided you to acquire a scientific approach to solving of problems as well as recognization of basic operations of deduction and induction?	7.4	27.8	42.6	15.7	6.5	3.14 (0.99)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

Item II grad	Response*					
	5 %	4 %	3 %	2 %	1 %	Mean (sd)
10. To what extent do you agree that your studies contributed to the development of reading habits which motivated you to study a topic in depth through use of references and research materials?	10.1	29.4	34.9	21.1	4.6	3.19 (1.03)
11. To what extent do you agree that your studies at the secondary level developed your ability to discuss, appreciate, make judgements, and disagree with readings?	25.5	36.4	18.2	15.5	4.5	3.63 (1.16)
12. To what degree do you feel that your high school studies contributed to your development of self-respect and loyalty to country and to the Arab world?	13.6	32.7	41.8	9.1	2.7	3.46 (0.94)
13. To what extent did your secondary level studies develop a positive attitude toward the utilization and conservation of natural resources?	54.5	28.2	7.3	10.0	0.0	4.27 (0.98)
14. To what degree do you feel that these studies developed cooperation in group work and a respect for the opinion of others?	29.1	33.6	27.3	5.5	4.5	3.77 (1.07)
15. To what extent do you agree that secondary level studies encouraged you to participate in extracurricular activities and developed your artistic, literary, scientific, and technological talents?	38.5	29.4	19.3	11.0	1.8	3.92 (1.09)
16. To what degree do you feel that the level of the subject-matters was suitable to each grade level?	8.3	29.4	31.2	14.7	16.5	2.98 (1.20)
Section II: Method of Teaching						
1. To what extent do you feel that the teachers interrelated the subject-matters with life situations and practical experiences	9.1	23.6	35.5	16.4	15.5	2.95 (1.18)
2. To what degree do you feel that the teachers used different methods and techniques appropriate to the nature of the subject-matters?	6.4	27.3	26.4	24.5	15.5	2.85 (1.18)
3. To what degree do you feel that the teachers at the secondary level used several teaching methods suitable to different ability levels of the students? (High, average, and low achievers)	11.8	21.8	30.0	20.0	16.4	2.93 (1.25)
4. To what extent do you agree that the method of teaching facilitated teacher-pupil interaction and allowed students the opportunity to express opinions?	6.4	17.3	21.8	27.3	27.3	2.48 (1.24)
5. To what extent do you agree that teachers used projects and team approach in teaching subject-matter at the secondary level?	3.6	10.0	30.9	22.7	32.7	2.29 (1.14)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

Item II grad	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. To what degree do you feel that teachers utilized different instructional media (materials) in lesson?	6.4	18.3	28.4	26.6	20.2	2.64 (1.18)
7. To what degree do you feel that teachers encouraged self-learning methods of research and experimentation through independent study?	15.7	17.6	31.5	25.9	9.3	3.05 (1.20)
8. From your point of view, to what degree was there interaction between teaching activities and textbook content?	9.1	25.5	33.6	24.5	7.3	3.05 (1.08)
9. To what extent do you agree that the teaching methods of various subject-matters at the secondary level helped develop the following habits and attitudes of critical thinking:						
a. suspending judgement?	12.7	30.9	32.7	14.5	9.1	3.24 (1.13)
b. accuracy of information?	13.6	32.7	28.2	18.2	7.3	3.27 (1.13)
c. evaluation of data sources?	7.5	31.1	26.4	21.7	13.2	2.98 (1.17)
d. utilization of references and resources?	15.6	17.4	24.8	24.8	17.4	2.89 (1.32)
Section III: Physical Facilities						
1. To what extent did the educational environment of the secondary shool you attended encourage the cognitive development of the students?	28.2	29.1	27.3	8.2	7.3	3.63 (1.19)
2. To what extent do you believe that the classroom size, furniture, lighting, ventilation were suitable for the various subject-matters?	22.7	26.4	16.4	19.1	15.5	3.22 (1.40)
3. To what extent do you agree that you benefitted from laboratory experiments in the following ways:						
a. emphasis on comprehension of concepts?	13.8	15.6	22.0	26.6	22.0	2.73 (1.34)
b. skills of apparatus and equipment use?	8.3	13.0	22.2	27.8	28.7	2.44 (1.26)
c. utilization of graphs, charts and tables in report writing of experimental results?	5.6	9.3	24.1	28.7	32.4	2.27 (1.17)
4. To what degree do you believe that you benefited from the school library in the following regard:						
a. method of cataloging which allowed quick referencing?	8.2	20.0	22.7	18.2	30.9	2.56 (1.33)
b. availability of reference material related to subject-matter?	8.3	15.6	18.3	27.5	30.3	2.44 (1.29)
c. availability of general reference materials and cultural resources?	24.3	24.3	19.6	20.6	11.2	3.30 (1.34)
5. To what extent do you agree that adequate instructional media were available and suitable for subject-matters at the secondary level?	10.2	21.3	30.6	22.2	15.7	2.88 (1.21)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

Item II grad	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. to what degree do you feel that the physical facilities for extra-curricular activities were suitable and sufficient for:						
a. clubs?	10.0	16.4	23.6	16.4	33.6	2.53 (1.37)
b. exhibitions?	8.2	15.5	20.9	30.9	24.5	2.52 (1.25)
c. sports?	7.3	22.7	25.5	21.8	22.7	2.70 (1.25)
d. stage?	7.3	10.9	13.6	20.9	47.3	2.10 (1.31)
e. mosque?	33.6	19.1	15.5	15.5	16.4	3.38 (1.49)
Section IV: Evaluation						
1. The process of evaluation at the secondary level consists of various examinations. To what extent do you feel that the following types of examinations are suitable for the secondary level:						
a. exams consisting of objective test items? (True-False, statement completion, multiple choice)	44.0	27.5	19.3	4.6	4.6	4.02 (1.11)
b. Essay tests? (expression of opinion or personal idea on a specific topic; discussion of an issue with supporting examples)	29.4	33.0	25.7	9.2	2.8	3.77 (1.06)
c. Performance tests? (laboratory experiments)	18.9	24.5	27.4	19.8	9.4	3.24 (1.24)
2. To what degree do you believe that tests you took during secondary school measured the following:						
a. review of facts?	20.2	35.8	22.9	17.4	3.7	3.51 (1.11)
b. comprehension?	22.9	28.4	32.1	10.1	6.4	3.51 (1.14)
c. ability to analyze?	11.0	16.5	39.4	19.3	13.8	2.92 (1.16)
d. ability to apply?	10.2	25.0	37.0	14.8	13.0	3.05 (1.16)
e. problem solving?	13.5	19.2	26.0	25.0	16.3	2.89 (1.28)
3. To what extent do you feel that the teacher depended on:						
a. formative evaluation?	11.2	20.6	32.7	19.6	15.9	2.92 (1.22)
b. monthly evaluation?	16.8	34.6	29.9	12.1	6.5	3.43 (1.11)
c. summative evaluation?	29.0	29.0	23.4	11.2	7.5	3.61 (1.23)
Section V: Textbook						
1. To what extent do you believe that the textbooks at the secondary level emphasized the following:						
a. suitability of book in relation to intellectual level of student?	10.1	23.9	33.9	13.8	18.3	2.94 (1.23)
b. sequencing of material in relation to content of books in previous grades?	16.5	28.4	30.3	17.4	7.3	3.29 (1.16)
c. organization of content of book and fluency of presentation?	12.0	25.0	34.3	16.7	12.0	3.08 (1.18)
d. clarity of concepts and progression from simple to more complex?	12.8	26.6	29.4	20.2	11.0	3.10 (1.19)
e. up to date information and knowledge?	19.4	34.3	24.1	13.0	9.3	3.42 (1.21)
f. sufficiency and differentiation of examples and suitability for grad level?	11.2	36.4	20.6	19.6	12.1	3.15 (1.22)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

Item II grad	Response[a] 5 %	4 %	3 %	2 %	1 %	Mean (sd)
I. To what extent do you believe that the textbooks at the secondary level emphasized the following: (cont'd)						
g. sufficiency and differentiation of exercises and problems and suitability for grade level?	14.7	30.3	28.4	17.4	9.2	3.24 (1.18)
h. effectiveness of activities and practical applications?	6.5	14.0	28.0	30.8	20.6	2.55 (1.16)
i. encouragement of utilization of various instructional materials and activities?	13.0	21.3	25.0	23.1	17.6	2.89 (1.29)
j. suitability of textbook in relation to the size and quality of printing?	16.7	19.4	21.3	16.7	25.9	2.84 (1.44)
k. clarity of figures, tables, maps, and pictures in relation to content of subject?	27.5	32.1	17.4	14.7	8.3	3.56 (1.27)

[a] Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

Part I: Section A
Parent Information

Item IA parents	Percent Response
1. Sex:	
male	91.5
female	7.4
2. Nationality:	
Omani	83.7
Non-Omani	15.2
3. What level of education have you completed?	
University or College graduate.	43.2
Attended Secondary School but did not graduate.	27.3
Finished Preparatory School.	10.2
Attended Preparatory School but did not graduate.	4.5
Finished Primary School.	14.8
Attended Primary School but did not graduate.	0.0
Can read and write but hold no certificate.	0.0
4. In what school district do you live?	
Muscat	19.0
Batinah	9.0
Sharqiyah	11.0
Dakhiliyah	13.0
Dhahirah	13.0
Roustaq	5.0
Wousta	10.0

Item IA parents	Percent Response
4. What School District do you live? (con't)	
Al Janoubiyah	17.0
Musandam	3.0
5. How many children do you have registered in the Secondary School?	
one	47.1
two	29.9
three	5.7
four	0.0
five	2.3
six	1.1
more than six	13.8
I do not have any children in Preparatory School.	0.0
6. If you have children in Secondary School, in what grade(s) is each of your children enrolled?	
first grade	29.0
second grade	22.6
third grade	46.8
7. Have you had children who have finished Secondary School before 1987?	
yes	15.3
no	83.5

Item IA parents	Percent Response
8. Do you know about the new Omani curriculum developed by the Ministry of Education since 1981 - 1982?	
yes	75.3
no	23.5
9. From what sources did you get your information about the new Omani Curriculum?	
I heard about the Omani Curriculum:	
When I was asked to give my opinion about the Omani curriculum.	21.6
From friends in the Ministry of Education and Youth.	14.9
From some of the teachers who instruct my children.	13.5
Through information in the mass media.	27.0
When I assisted my children with their homework.	23.0
10. How frequently do you participate in teacher-parent meetings?	
All such meetings.	50.6
Sometimes.	35.4
Never.	12.7

Part I: Section B
Parent Opinion Survey

Item IB parents	Response*					
	5	4	3	2	1	Mean (sd)
	%	%	%	%	%	
1. My child has experienced difficulties with the new Omani curriculum in :						
a. Islamic Education	10.0	2.5	21.2	7.5	58.7	1.98 (1.35)
b. Arabic Language	8.9	10.1	32.9	13.9	34.2	2.46 (1.30)
c. Geography	5.4	13.5	25.7	21.6	33.8	2.35 (1.23)
d. History	7.4	5.9	27.9	27.9	30.9	2.31 (1.19)
e. Human Culture	6.2	16.9	15.4	15.4	46.2	2.22 (1.35)
f. Civic Education	10.3	2.9	16.2	17.6	52.9	2.00 (1.33)
g. Physics	19.0	23.8	32.1	13.1	11.9	3.25 (1.25)
h. Chemistry	18.5	27.2	23.5	14.8	16.0	3.17 (1.34)
i. Biology	11.3	16.9	29.6	12.7	29.6	2.68 (1.36)
j. General Sciences	9.0	10.4	31.3	17.9	31.3	2.48 (1.28)
k. Mathematics	30.1	22.9	24.1	10.8	12.0	3.48 (1.35)
l. English Language	34.2	26.6	13.9	7.6	17.7	3.52 (1.48)
2. My child is usually assigned enough homework.	27.9	16.2	29.4	10.3	16.2	3.29 (1.40)
3. My child usually encounters difficulties in doing his homework in the following subjects:						
a. Islamic Education	2.8	2.8	18.3	16.9	59.2	1.73 (1.04)
b. Arabic Language	6.8	8.1	21.6	28.4	35.1	2.23 (1.21)
c. Geography	4.4	11.8	30.9	27.9	25.0	2.43 (1.12)
d. History	4.6	7.7	24.6	26.2	36.9	2.17 (1.15)
d. Human Culture	6.3	17.2	18.8	20.3	37.5	2.34 (1.31)
e. Civic Education	10.1	8.7	11.6	21.7	47.8	2.12 (1.37)
f. Physics	19.0	27.8	24.1	19.0	10.1	3.27 (1.26)
g. Chemistry	21.3	22.7	28.0	14.7	13.3	3.24 (1.31)
h. Biology	13.0	7.2	33.3	17.4	29.0	2.58 (1.33)
i. General Sciences	9.1	13.6	36.4	10.6	30.3	2.61 (1.30)
j. Mathematics	25.0	28.7	16.2	16.2	13.7	3.35 (1.38)
k. English Language	28.7	27.5	20.0	6.3	17.5	3.44 (1.42)
4. I usually help my child in doing his homework, and find:						
a. there is too much homework.	4.1	13.7	30.1	20.5	31.5	2.38 (1.19)
b. it is difficult for the child to do the homework on his own.	12.5	8.7	30.0	18.8	30.0	2.55 (1.34)
c. I like to see the school work through my child's homework.	33.7	25.0	21.2	10.0	10.0	3.63 (1.32)
5. My child usually spends some time everyday studying the subject matter that was taught to him that day.	30.1	34.9	18.1	9.6	7.2	3.71 (1.21)
6. My child usually spends his time after he comes from school in:						
a. doing his homework only.	12.8	26.9	35.9	10.3	14.1	3.14 (1.20)
b. studying the material that he covered that day in school.	26.5	36.1	21.7	8.4	7.2	3.66 (1.17)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

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Item IB parents	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
6. My child usually spends his time after he comes from school in: (cont'd)						
c. preparing for the next day's lessons.	27.8	25.3	24.1	7.6	15.2	3.43 (1.38)
d. doing activities related to the school curriculum.	9.3	12.0	34.7	25.3	18.7	2.68 (1.19)
e. watching TV and listening to the radio.	11.7	14.3	44.2	22.1	7.8	3.00 (1.08)
f. playing outside the house with his friends.	8.0	9.3	28.0	25.3	29.3	2.41 (1.23)
7. Because my child's textbooks are interesting, I usually read the following:						
a. Islamic Education textbooks.	35.6	12.6	27.6	10.3	13.8	3.46 (1.42)
b. Arabic Language textbooks.	23.8	16.7	28.6	15.5	15.5	3.18 (1.37)
c. Geography textbooks.	11.5	17.9	17.9	17.9	34.6	2.54 (1.42)
d. History textbooks.	16.2	20.3	29.7	14.9	18.9	3.00 (1.33)
e. Human Culture textbooks.	12.7	15.5	33.8	9.9	28.2	2.75 (1.36)
f. Civic Education textbooks.	15.9	14.5	21.7	15.9	31.9	2.67 (1.46)
g. Physics textbooks.	7.4	4.4	22.1	13.2	52.9	2.00 (1.27)
h. Chemistry textbooks.	4.7	9.4	20.3	17.2	48.4	2.05 (1.23)
i. Biology textbooks.	7.5	11.9	14.9	25.4	40.3	2.21 (1.30)
j. General Science textbooks.	7.8	18.8	25.0	12.5	35.9	2.50 (1.36)
k. Mathematics textbooks.	14.7	7.4	23.5	13.2	41.2	2.41 (1.46)
l. English Language textbooks.	16.9	13.8	24.6	15.4	29.2	2.74 (1.45)
8. I feel that the textbooks that my child studies are:						
a. well designed and printed.	32.5	38.6	15.7	6.0	7.2	3.83 (1.17)
b. attractive and interesting.	23.4	31.2	24.7	14.3	6.5	3.51 (1.19)
c. appropriate for his age.	16.7	25.6	34.6	10.3	12.8	3.23 (1.23)
9. I feel that the content of my child's textbooks is:						
a. well presented and easy to understand.	6.6	31.6	40.8	10.5	10.5	3.13 (1.05)
b. supported with illustrations and pictures to make it easy to follow.	16.7	38.1	26.2	13.1	6.0	3.46 (1.10)
c. written in a manner that makes it easy for the child to read and understand.	22.9	24.1	31.3	13.3	8.4	3.40 (1.22)
d. written in a direct way and to the point manner.	26.7	29.3	26.7	8.0	9.3	3.56 (1.23)
e. suits the abilities of the child and stimulates his interest.	15.2	32.9	32.9	13.9	5.1	3.39 (1.07)
f. encourages the child to read.	12.3	32.1	37.0	14.8	3.7	3.35 (1.00)
g. motivates the child to do his homework.	12.7	32.9	39.2	10.1	5.1	3.38 (1.00)
10. I encourage may child to tell me about what goes on in his school.	40.7	24.4	18.6	8.1	8.1	3.81 (1.28)
11. My child always talks about the new Omani curriculum:						
a. enthusiastically.	21.1	23.7	26.3	18.4	10.5	3.26 (1.28)
b. negatively.	4.2	16.7	30.6	18.1	30.6	2.46 (1.21)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

Item IB parents	Response* 5 %	4 %	3 %	2 %	1 %	Mean (sd)
12. My child usually shows that he likes:						
a. the content included in his textbooks.	22.5	27.5	32.5	12.5	5.0	3.50 (1.13)
b. the activities that he does related to the subject matter he is studying at school.	18.2	31.2	29.9	10.4	10.4	3.36 (1.20)
13. The Omani curriculum encourages my child to apply what he learned at school to everyday activities outside of school.	19.0	22.6	36.9	10.7	10.7	3.29 (1.21)
14. The Omani curriculum allows my child to grow intellectually from one year to the next.	29.9	33.3	19.5	12.6	4.6	3.71 (1.16)
15. I usually assess my child's progress by :						
a. grade reports that he receives from the school.	56.0	25.0	9.5	3.6	6.0	4.21 (1.14)
b. meetings with his teachers.	31.4	23.3	23.3	5.8	16.3	3.48 (1.41)
16. I feel that my child's behavior has improved as the result of applying the Omani curriculum in the following situations:						
a. his interaction with the various family members.	35.4	34.1	19.5	4.9	6.1	3.88 (1.14)
b. his friends in the community.	29.1	32.9	25.3	11.4	1.3	3.77 (1.04)
c. his interactions with the teachers.	44.7	24.7	22.4	3.5	4.7	4.01 (1.12)
17. I feel that the Omani curriculum is suitable to educate my child, especially in introducing him to:						
a. the Islamic values.	51.2	30.2	8.1	7.0	3.5	4.19 (1.08)
b. the Arabic culture.	39.8	31.3	18.1	8.4	2.4	3.98 (1.07)
c. his Omani heritage.	42.7	32.9	15.9	2.4	6.1	4.04 (1.12)
d. modern science and technology.	33.7	26.2	21.2	13.7	5.0	3.70 (1.22)

* Response Key: 5 = Mostly; 4 = Frequently; 3 = Sometimes; 2 = Rarely; and 1 = Never

END

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